

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.

April 2011

Presidents Log

Tom is busy preparing for Friday's Program

We'll hear more from him next month.

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Opportunities

The Monday night RARA Information Net needs a larger roster of Net Control Stations

If you are interested in becoming a Net Control Operator, please contact either one of the Officers or Board members. It's an easy thing to do, and you work from a script. No need to worry what to say. Let's get you on the schedule.

NEXT MEETING

FRIDAY
April 8, 2011
7:00P.M.

Location:
Foundation Room
Saint Anthony OSF
5666 East State Street
Rockford, Illinois

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



From the Treasurer

Treasurer's Report: For the period 24 JAN,2011 to 20 FEB 2011
submitted to the Ham Rag by John G. Olson 2011 RARA treasurer.

Income :	\$ 171.00
Expenses:	\$ NONE
Ending Checkbook Balance:	\$4021.25
Ending Repeater checking balance:	\$ 300.00 (per 31 JAN 2011 statement)
Ending Savins Balance	\$3214.02 (no change)
Ending total cash on hand:	\$7535.27 (net gain \$171.00)

REMINDER! 2011 dues are payable now.
Please be kind and fill out the form so I can verify that your information is current....

The next page contains the letter sent to us about our donation to St. Anthony Hospital



OSF™

SAINT ANTHONY MEDICAL CENTER
FOUNDATION COUNCIL

March 22, 2011

Foundation Board

Brent Johnson
Chairperson

Cheri Grennan Smith
Vice Chairperson

Tom Muldowney
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Pat Shaw

David A. Schertz, FACHE
President and CEO

Richard E. Zumwalt, CFRE
Executive Director

Rockford Amateur Radio Association
PO Box 8465
Rockford, IL 61126-8465

Dear Rockford Amateur Radio Association,

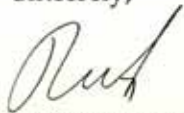
On behalf of the Sisters and patients of OSF Saint Anthony Medical Center, I would like to sincerely thank you for your response to our Spirit to Serve appeal as we undertake funding 22 deserving requests from within the medical center. Our patients will benefit from your generous gift of \$100.00.

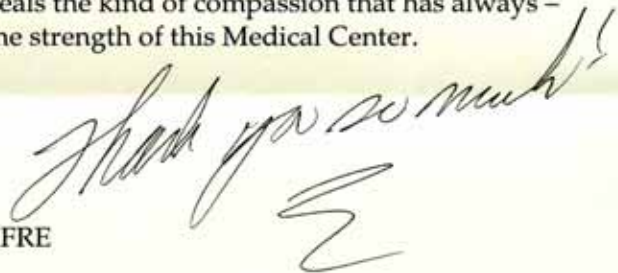
Your support will help us fulfill our commitment to offer the best care through continual investments in equipment, technology, research and improved care methods.

OSF Saint Anthony Medical Center is committed to exceeding the needs of those who turn to us, fostered by our Mission that lives in our people every hour of every day, to ensure the best care possible for every patient, every time.

I thank you for your generous concern for the patients at OSF Saint Anthony. Your gift reveals the kind of compassion that has always – and continues to be – the strength of this Medical Center.

Sincerely,


Richard E. Zumwalt, CFRE
Executive Director



Per IRS regulations, we affirm that you have not received any item of value in return for your contribution to the OSF Saint Anthony Medical Center Foundation.

Secretary's Report



RARA Meeting Minutes March 2011

The March 11, 2011 meeting of the Rockford Amateur Radio Association was called to order at 7:08 PM by President Tom Shouler N9VJU with 22 members and guests present.

Self introductions were made by all present.

Dave Bond W9MG moved we accept the minutes from the February 2011 meeting as printed in the Ham Rag, Jeff Anderson N9ZUT seconded.

John Olson W9JGO was excused due to his wife being ill so the financial report will be delayed until next month.

Old Business: Bob Davidson WA9NTT inquired about the membership committee. John N9OTC reported it has collapsed and is now a dead committee due to every member except one (Himself) resigning or simply not showing up to committee meetings.

John then reported RARA now has a total of only 38 members including the free life members and spousal members. Of the dues paying members, more than half are paying half price dues. We need more members to survive and John challenged each and every member to bring a new member or an old member back to the club.

New Business: Alvin KC9GIO spoke about getting a group together to go to Dayton.

Jeff N9ZUT talked about the 10Meter SSB net on 28.375 MHz at 9:00 PM (Local time) tomorrow night.

Program: Robert Larson KC9ICH put on a great program on LEO Amateur Radio Satellites; From beginners to experts.

Adjournment: Motion to adjourn by Jeff Anderson N9ZUT, second Jim Miller W4JR. Meeting adjourned at 9:15PM

Respectfully submitted
John Lawence N9OTC
Secretary; RARA

The K7RA Solar Update

The activity we could see recently on our Sun's far side – thanks to the STEREO mission (<http://stereo.gsfc.nasa.gov>) -- has been rotating into view, producing some nice sunspot activity and the resulting improved upper-HF propagation. Compared to the previous week (March 17-23), the past week (March 24-30) showed average daily sunspot numbers up over 61 points to 102.1, and average daily solarflux up nearly 20 points to 114.7. Geomagnetic conditions were quieter as well, and reports from readers show greatly improved propagation on all the upper-HF bands, 20 through 10 meters.

The table at <http://www.swpc.noaa.gov/ftplib/indices/DSD.txt> shows anew sunspot group on March 23, two more groups appeared March 24, two more on March 25, and two more on March 27.

The latest prediction from USAF/NOAA, issued Thursday, March 31 differs from the one from the previous day. The March 30 prediction was referenced in the ARRL Letter, and the new prediction is less optimistic in terms of increasing solar activity.

The March 31 projection shows solar flux at 115 on April 1-2, 110 on April 3-5, 105 on April 6-8, 100 on April 9-10, and for April 11-17 flux values of 95, 95, 90, 88, 88, 90 and 100. Then they show a rise to 125 on April 19-27, and 135 on April 28.

The latest planetary A index projection shows an Ap of 8 on April 1,5 on April 2-7, 8 on April 8, and back to 5 on April 9-17. Geophysical Institute Prague predicts quiet to unsettled conditions April 1, quiet April 2-4, quiet to unsettled April 5, and unsettled April 6-7.

Rob Steenburgh, KA8JBY informs us of the annual Space Weather Workshop, scheduled April 26-29, 2011 in Boulder, Colorado. Check <http://www.swpc.noaa.gov/sww> for details and registration information.

Rob also reminds us, "There is a nice web application for examining imagery from the SDO and SOHO spacecraft. It is called 'Helioviewer' and can be found at <http://helioviewer.org>. There's also an open-source application folks can load on their computer called 'JHelioviewer' at <http://jhelioviewer.org>. Users can create whole-disk animations as well as movie loops zoomed in on active regions. They can also overlay various images. JHelioviewer and Helioviewer.org is open-source projects for the visualization of solar and heliospheric data. The projects are funded by ESA and NASA."

I noticed that <http://helioviewer.org> seems to work much better than when it was first announced. You can zoom in on the latest images, and also step back in time to see how the Sun has changed over the previous few hours, days or weeks. Now that March has ended, we can review some sunspot number averages over previous months. The monthly averages for sunspot numbers, December 2010 through March 2011 were 22, 32.2, 53.5 and 81.1. This represents a dramatic increase in solar activity. We've also been looking at a 3-month moving average, and the latest is for January 1 through March 31, centered on February. The three month moving average centered on March 2010 through February 2011 was 22.3, 18.5, 16.4, 20.4, 23.2, 28.9, 33, 35.6, 31, 30.1, 35.3 and 55.7. So to review and clarify, 35.3 is the average for all daily sunspot numbers from December 1 through February 28, and 55.7 is the average of all sunspot numbers from January 1 through March 31.

FRIDAY MORNING BREAKFAST

Meets every Friday morning from 8 am until about 9:30 am. An informal gathering of ham folks, no affiliations necessary, good food and good company.

Everyone is welcome to attend.

"The Stockholm Inn"
2420 Charles Street
Rockford, IL 61108



The K7RA Solar Update

Charles Tropp, N2SO of Staten Island, New York is excited about 10-meter propagation. He writes, "I saw a spot for 5N7M Ivan in Abuja, Nigeria on Monday 3/29 at 2000 UTC on 28.009 MHz CW so I checked the frequency and sure enough there he was loud and clear in Staten Island, NY. He was working US call areas 1,2,3,4 and 5, none of which I could hear. So I turned on my XIT up about 1.25 and gave him a call. He came right back to me about 589. After I logged him I decided to check my Ham Cap propagation program which I run with IonoProbe and DX Atlas to see why this QSO was possible with my backyard vertical and my K3 running 100W. The effective SSN was about 72 at the time, KP was 1 and yes according to DX Atlas there was a thin crescent moon shaped propagation path running down Mexico and Central America, across the South Atlantic and just reaching Nigeria about 5,230 miles from my QTH. All of the US was dark which explains why I couldn't hear any other signals. I just thought I would share my excitement."

At first I was confused by Charles' description of the propagation path, because this seemed an unlikely route for his signal to take. But he is probably talking about areas shown on the map that have propagation to Nigeria, which could be over a large area.

You can see a nice photo of Charles and his station at <http://www.qrz.com/db/n2so>. Click on the photo to zoom in.

Randy Crews, W7TJ of Spokane, Washington is excited about the increased solar activity and resulting HF propagation. He writes, "This past month has been the most amazing this year for high band propagation, as I am certain all DXers would agree for Cycle 24. There have been more days with the solar flux over 100 than below, in addition reaching a new high. 17 meters sounds like 20, both 17 and 15 are loaded with DX stations from sunrise to well after sunset. 12 meters has been extremely productive in the past few days, with EU DX from 1500Z to 2200Z! I have had QSOs with stations not heard since 2001-02 as folks renew their interest. It really is great to see the high bands snap back after an incredibly long dry spell."

Mike Shaffer, KA3JAW of Tampa, Florida sent in a link to some video recordings of broadcast television DX via tropospheric propagation from Cuba. You can see it at <http://www.youtube.com/watch?v=cBuxDSSA8D0>. This shows several stations received on Sunday, March 27.

Eric Bowen WK4CW of Winston-Salem, North Carolina sent in this report: "Just a report from the CQ WPX contest. Between 2200-2300 UTC on 3/27/2011, I was able to work VK4RK and VK4MC along with several JAs on 10 meter SSB from Winston-Salem, NC. I personally have not worked any VKs from the East Coast on 10 meters in quite a long time and all were between 5/7 to 5/9 RST. Rig was FT-920 at 100 watts and Force 12 up 70 feet. Conditions on all bands were good throughout the contest and the flux at the time was 115 with K and A indexes both at 1. The SSN was 104."

This report arrived on March 27: "I am Steve Moles N5TEY from Pawhuska, OK. I have read your propagation column weekly from the ARRL for years. I have always envied those operators you noted in your report who had worked the hard to find DX stations on an upper band. I was fortunate enough to catch one of those openings myself today.

"I had just come home from church and opened my Bandmaster program and saw that VU2PAI (Ananth in Mangalore, India) was working well into the US on 12M. I moved late last fall and only have up a Cushcraft MA5V using RG-8X feed line at 250 watts from 746 Pro at this time. The past winter has been tough here and I am just now preparing to put up my tower for my hybrid cubical quad. The reports from the cluster reported Ananth as being a true 59 into the southern US; I thought I would give it a try.

"I turned on the 746 Pro and tuned to 24.965 MHz and VU2PAI was there at a true 59 at my home in northern OK. I tuned my amplifier and gave a call up two (24.967 MHz) and Ananth replied to me on the first call as 59 into southern India at 1613 UTC. I was so shocked I almost fell out of my chair! One of my daughters was in the room with me and she asked where the guy was I had just spoken with? She was amazed at how well he sounded.

"I had read last week about N8II reporting daily openings on 12M into EU. I was able to experience the 12m opening today myself and still can hardly believe it." Check out Steve's site at <http://n5tey.com>.

The K7RA Solar Update

Rich Dowty, W7EET of St. Paul, Oregon notes that the DX Sherlock site <http://www.vhfdx.info/spots/map.php>) also shows HF propagation maps in addition to VHF. You can select HF and any continent to look at current conditions.

If you would like to make a comment or have a tip for our readers, email the author at, k7ra@arrl.net.

For more information concerning radio propagation, see the ARRL Technical Information Service web page at <http://arrl.org/propagation-of-rf-signals>. For an explanation of the numbers used in this bulletin, see <http://arrl.org/the-sun-the-earth-the-ionosphere>. An archive of past propagation bulletins is at <http://arrl.org/w1aw-bulletins-archive-propagation>. Find more good information and tutorials on propagation at <http://mysite.ncnetwork.net/k9la/index.html>.

Monthly propagation charts between four USA regions and twelve overseas locations are at <http://arrl.org/propagation>.

Instructions for starting or ending email distribution of ARRL bulletins are at <http://arrl.org/bulletins>.

Sunspot numbers for March 24 through 30 were 73, 104, 104, 132, 103, 108, and 91, with a mean of 102.1. 10.7 cm flux was 107.6, 112.6, 114.5, 115.6, 118.5, 116.2, and 117.6, with a mean of 114.7. Estimated planetary A indices were 4, 3, 1, 2, 3, 4, and 5, with a mean of 3.1. Estimated mid-latitude A indices were 3, 2, 1, 2, 2, 2, and 4, with a mean of 2.3.

A Local DX Report

After two nights of on and off persistence, I managed to make a confirmed contact on 20 meters (14.305 mhz) with 5M2TT in Liberia. The most difficult part was the fact that he was running split (listening up anywhere from 5 to 10 mhz) so I never really knew what frequency he was listening to. Anyway, he was a very busy person, making 12-15 contacts per minute. He has over 32,000 look-ups on QRZ.

Paul Larsen KB9MCX

President BTARC

AMATEUR RADIO EXAM NOTICE

March 19th there were 3 applicants resulting in 2 upgrades.

New

None

Upgraded

Steven J Marcum, KF9CN - Extra
David C Smith, N9QFK - Extra

Northern Illinois Volunteer Examiners will be holding the next Amateur Radio exam session in Rockford, IL on Saturday, April 16, 2011.

Location:

St Anthony Hospital
5666 E State St
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)

Rusty Cordell, WB9QYV

AREA Repeaters

146.610 -	ENC/DEC pl 114.8	W9AXD
147.000 +	ENC/DEC pl 114.8	W9AXD
223.880 -	ENC/DEC pl 118.8	W9AXD
ATV input	1250 Mhz/ 434 Mhz	W9ATN
	output 421.25 Mhz	
146.805 -	ENC/DEC pl 114.8	K9AMJ
224.440 -	ENC/DEC pl 118.8	K9AMJ
147.255 +	ENC/DEC pl 114.8	WX9MCS
444.725 +	ENC/DEC pl 107.2	WX9MCS
	Linked to FISHFAR	

2010 RARA Officers and Board

Officers:

President - Tom Shouler, N9VJU, 815-877-9129
Vice President - OPEN
Secretary - John Lawrence, N9OTC, 815-397-4624
Treasurer - John Olson W9JGO

Directors:

Al Fischer, KD9CA, 815-885-3926
Gordon Seaman, KC9NEX, 815-234-5034
Steve Thorne, K9LLI, 815-399-9161
Web Master - Robert Larson, KC9ICH, 815-226-1875
Ham Rag Editor - Jim Holich, AB9SX, 779-522-8796
Repeater Chairman - Chuck Ingle, AB9KA, 815-979-1049

Velocity Factor, What is it?

By Richard Morrow, K5CNF

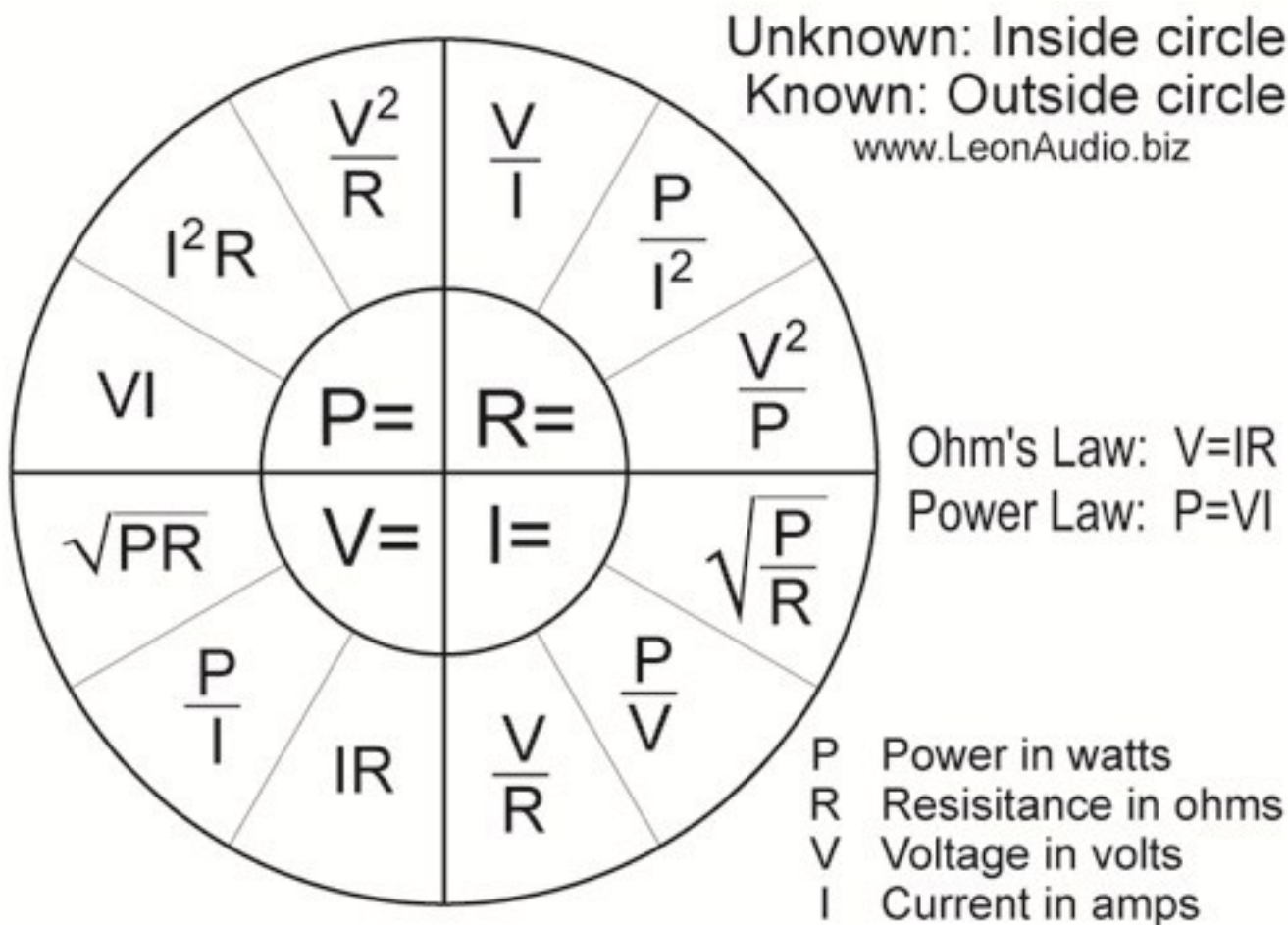
Many hams do not understand what the term velocity factor means. Abbreviated as VF, it is way of expressing what the speed of a radio signal is in a transmission line and it is written in a percentage, such as 66%. This means the radio signal is travelling at .66 the speed of light in space. Ok, you say, so how does this affect me?

Well, if you want to build a phased array, in order to get the correct length of the phasing lines, you must figure the VF to get the correct length. This is important to ensure that the driven elements are phased correctly.

If the cable has a VF of .66, then you must take the figure calculated for a half wavelength at the frequency you are going to operate and then multiply it by the VF in this case, .66.

So, for a half wavelength phasing line on 40 meters, by dividing 486/7.00 MHz you will get 66.86 ft. Then multiply 66.86 by .66 and you get 44.13 feet as the correct length for this particular piece of cable. Different cables have different velocity factors but the manufacturers have these figures usually in their catalogs. TV twin lead has a velocity factor of .88 and open latter line is slightly higher at about .90. For the most part, VF is not important to most hams, but if you intend to phase antennas, it becomes very important, e.g.,

Power Wheel



Hamfest Information

Ozaukee Radio Club
33rd Annual Indoor Amateur Radio, Electronics & Computer Swapfest in Cedarburg, Wisconsin
Saturday May 7th, 2011
8 a.m. to 1 p.m.
Circle B Recreation Center at State Hwy 60 and Oz City Hwy 1

Starved Rock Radio Club
June 5th, 2011
Bureau County Fairgrounds
Princeton, Illinois 61356
I-80 to Exit 56 (IL Rte 26) then South 2 miles to IL Rte 6 , then West 1/2 mile

South Milwaukee Amateur Radio Club
Swapfest 11
Saturday July 9th, 2011
6:30 a.m.
American Legion Post 434
9327 South Shepard Avenue
Oak Creek Wisconsin
Tickets \$5.00
Talk in Freq. 146.52

Chicago FM Club
Saturday and Sunday September 10th and 11th, 2011
Boone County Fairgrounds
8791 Route 76
Belvidere, Illinois
6 a.m. to 3 p.m. both days
Complete listing at <http://www.chicagofmclub.org/radioexpo2011.html>

59th Annual W9DXCC Convention & Banquet
Saturday September 17th 2011
Holiday Inn—Elk Grove Village
630-844-8301

Southeast Iowa Hamfest
Sunday, October 2, 2011
Muscatine County Fairgrounds
101 Clay Street
West Liberty, Iowa
7 a.m. Tickets \$5.00
Repeater 146.31/91, CTSS 192.8 Hz
Tom Brehmer n0loh@arrl.org



P.O. Box 8465, Rockford, IL 61126

Website: www.w9axd.org

E-mail: jholich@comcast.net

Nets

Monday 8 PM	RARA Info.	146.610 - 114.8
Thursday 7 PM	ARES	147.255 + 114.8
Thursday 8 PM	SATERN	146.610 - 114.8

place address label here

April 2011

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