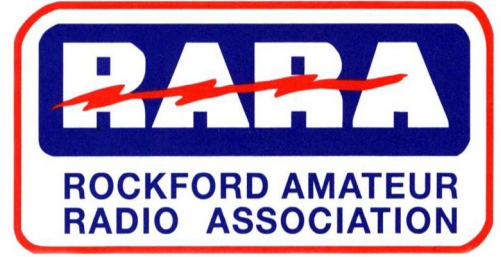


# HAM RAG



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

This months program will be on the Sterba Curtain antenna. This is a wire antenna that can be made in several different ways. Either as a mono band antenna or as a multiband antenna. There are several ways to construct this antenna, and I will have mine with me as it is very portable. This is 1920's technology that works very well today with a very high gain. Mine is a 20 meter Mini-Sterba curtain antenna and works extremely well.

See you at the meeting

### Tom N9VJU

A Sterba Curtain Array is a directional array that exhibits gain with respect to a dipole. A Sterba Curtain consists of several elements fed by transposed sections of transmission line. The feed line is normally at the end of the array.

The two elements of the Sterba Curtain are 1/4 wavelength long, providing an impedance transformation for the input, and a termination for the last section. When fed, the input is at a current maximum.

The Sterba antenna has a bi-directional response pattern, with the maxima perpendicular to the plane of the elements; therefore it is a broadside array. A screen could be placed 1/4 wavelength behind the array to provide a unidirectional response.

Sterba arrays can be used at any frequency up through VHF. They were once popular for point to point communication systems on the HF bands where their directional characteristics provided an advantage. The array can be mounted with the elements vertical or horizontal.

**Amateur Radio Encyclopedia**  
**Stan Gibilisco W1GV Editor**  
**Page 473**

There are many articles on the web as well as in QST. Some are even for 2 Meters

Jim Holich  
AB9SX

## September 2011

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### NEXT MEETING

**FRIDAY**  
**September 9, 2011**  
**7:00P.M.**

**Location:**  
**Foundation Room**

**Saint Anthony OSF**  
**5666 East State Street**  
**Rockford, Illinois**

**Program:**  
**Sterba Curtain Antenna**



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

## From the Treasurer

**Treasurer's Report:** For the period 24 July 2011 to 28 August 2011 submitted to the Ham Rag by John G. Olson 2011 RARA treasurer.

Income :	\$ 15.00 (Dues)
Expenses:	\$ 294.00 (OTW tickets for volunteers)
Ending Checkbook Balance:	\$3375.25 (per check register 28 AUG 2011)
Ending Repeater checking balance:	\$ 300.00 (per 29 JUL 2011 statement)
Ending Savings Balance	\$3218.83 (per 30 JUN 2011 statement)***
Ending total cash on hand:	\$6894.08 (net decline of \$279.00)

\*\*\* Savings account statements are issued by Alpine Bank quarterly

We welcome the following new members:

Jason McDonough, KD9UNC  
James Dorsey, KC9GCR

## Secretary's Report

### RARA Meeting Minutes August 2011

The August 12, 2011 meeting of the Rockford Amateur Radio Association was called to order at 7:17 PM by President Tom Shouler N9VJU with 21 members and guests present.

Motion to accept the minutes from the July 2011 meeting as read by Secretary John Lawrence made by Jim Holich AB9SX, Second by Chuck Derwent K9SAN, passed.

Motion to accept the Treasurers report as printed in the HAMRAG made by Gordy Seaman KC9NEX, second by Jim Holich AB9SX, passed.

**Old Business:** Kurt Eversole KE9N reported on the progress of the "On the Waterfront" money raising project he is co-chairing with Gordy Seaman KC9NEX. We are teaming with the Pine Tree Pistol Club to raising money on a ratio (Money to hours worked) basis.

Chuck Ingle AB9KA is turning the 146.61 antenna issue over to the head engineer of WROK/WZOK to see if the repeater problems actually have anything to do with the antenna or not and which antenna we are actually on.

**New Business:** Kurt Eversole KE9N reported that Robert Larson KC9ICH has had back surgery for 2 bad discs. The HAM RAG had to be mailed out directly to the members this month. Can somebody fill in for him while he is laid up? John Olson W9JGO said there were some problems with stale email addresses and asked that anybody who may have changed their email addresses to please let him know by the Saturday before the meeting so he can update them.

Eric Hultgren N9MCS showed a CD allegedly of a meeting he claims was illegally recorded. Dave Bond W9MG moved this matter be referred to the board, Jim Holich AB9SX seconded, motion which was passed by voice vote.

The business portion of the meeting ended at 7:44 PM

The program followed the meeting.

Respectfully submitted  
John Lawrence N9OTC  
Secretary; RARA

# AMATEUR RADIO EXAM NOTICE

August 20th there were 4 applicants resulting in 3 new licenses and 1 upgrade.

**New:**

Craig A Graham - General  
Matt A Mlsna - Technician  
Scott J Orsinger - Technician

Amateur Radio exams are held in Rockford IL on the 3rd Saturday of every month. The next session is September 17, 2011 at 9:00 AM. Walk-ins welcome.

**Location:**

OSF 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 Radio license AND A COPY.
2. Any valid CSCE that you are using for exam credit AND A COPY.
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 payable to W5YI-VEC.

Rusty Cordell WB9QYV  
wb9qyv@aol.com

## 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
<b>ATV</b> 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:**

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

## The K7RA Solar Update

ARLP035 Propagation de K7RA QST de W1AW Propagation Forecast Bulletin 35 ARLP035  
From Tad Cook, K7RA  
Seattle, WA September 2, 2011  
To all radio amateurs

SB PROP ARL ARLP035 ARLP035 Propagation de K7RA

The bulletin comes to you this week dispatched from another session of Camp Blues, this time in Portland, Oregon.

Sunspot activity rose again this week, with the average daily sunspot number up nearly 18 points to 83.6. Geomagnetic indices (both planetary and mid-latitude) were each down slightly. High sunspot number for the week was recorded on Wednesday, August 31, at 121. The last time the sunspot number was higher was on July 31 and August 1, at 128 and 130. Prior to that on July 18 it was 127.

If you check the Daily Sun image at <http://www.spaceweather.com/>, currently there are quite a number of spots on the Sun.

Predicted solar flux is 110 on September 2-5, 105 on September 6, 100 on September 7-8, 95, 90, 92, and 95 on September 9-12, 100 on September 13-15, then peaking at 105 on September 18-22.

The solar flux values for the next few days are slightly higher than the prediction in yesterday's ARRL Letter.

Predicted planetary A index is 5 on September 2, 8 on September 3-4, 5 on September 5-10, then 8, 12, and 8 on September 11-13, and 5 on September 14-17.

As always, the Czech Republic has a slightly different view, and the Geomagnetic Department of Geophysical Institute Prague says September 2 should be quiet, September 3 unsettled, September 4 quiet to unsettled, and September 5-8 quiet again.

Looking back at the three-month moving average of sunspot numbers, we now have the data for June through August, which gives us the three-month average centered on July. At 63, it is only slightly above the average centered on June, 61.5. The 3 month averages for this year, centered on January through July were 35.3, 55.7, 72.3, 74.4, 65.9, 61.5 and 63. For 2010 three-month averages, the high was 35.6, centered on October, and the low was 16.4, centered on May.

Utah State University has a Space Weather Center web site, where they have been posting frequency availability related to communications with the National Hurricane Center in Miami. You can see current and projected NVIS (Near Vertical Incidence Skywave) coverage across the Eastern Seaboard, as well as worldwide propagation maps for 75, 40 and 20 meters centered on Miami.

Take a look at <http://spaceweather.usu.edu/htm/emergency-hf-communication-hurricane-irene>.

Thanks to Thomas Otterbein, DG8FBV of Babenhausen Germany, for noticing that in the last bulletin we referred to the NOAA Preliminary Report and Forecast as a good source for smoothed sunspot numbers. That is true as a general statement, and you can see the past and predicted progress of the current sunspot cycle. But Thomas points out that this is not the smoothed sunspot number you should use with VOACAP propagation prediction software. He writes:

"For VOACAP, VOAAREA users and for users of prediction programs such as GUI which uses VOACAP the predicted SSN should be taken from: [http://ftp.ngdc.noaa.gov/STP/SOLAR\\_DATA/SUNSPOT\\_NUMBERS/sunspot.predict](http://ftp.ngdc.noaa.gov/STP/SOLAR_DATA/SUNSPOT_NUMBERS/sunspot.predict)

"For this see also:  
<http://www.voacap.com/choosingssn.html>."

For some nice photos of Thomas and his station, check <http://www.qrz.com/db/dg8fbv> (which now requires a login with a free account on that site), and also <http://www.dg8fbv.de/>.

We are only a few weeks away from the Autumnal Equinox in the Northern Hemisphere - September 23, 2011 - and the transition occurs at 0904z. We are transitioning out of Summer HF propagation to the more favorable Fall conditions. To get an idea of how much better Fall propagation is, try using 6ELprop or a similar propagation program (see <http://www.qsl.net/w6elprop/>) with some dates such as July 15 compared to September 23. You can have two of these running at the same time, to make it easy to switch back and forth for comparison.

## The K7RA Solar Update

I did one from the center of the contiguous 48 United States to Germany, and used a sunspot number of 120 (slightly optimistic) for both dates. The propagation is radically different between those two dates, and so much better for the Fall date. Give it a try.

Frank Donovan, W3LPL of Glenwood, Maryland pointed out that a new monthly prediction for the solar cycle was released by NASA in early August. You can read it at <http://solarscience.msfc.nasa.gov/predict.shtml>. But it isn't really a new forecast, as the only thing that changed was the date from July 1 to August 2, which was why we didn't mention it in the bulletin. But on September 1 a new forecast was released with a slightly revised prediction for the sunspot cycle maximum. Instead of the smoothed sunspot number peaking at 69 in June-July 2013, it is now predicted to peak at 70 in May 2013. These forecasts are not archived, and the same URL is used every month, so a personal record must be kept to note changes.

Frank also sent this note on September 1: "Trans-polar HF propagation has significantly picked up in the last week on 20, 17 and 15 meters. This is the usual seasonal change, as well as solar flux consistently above 100 and K indexes mostly 2 and below."

If you would like to make a comment or have a tip for our readers, email the author at [k7ra@arrl.net](mailto: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://myplace.frontier.com/~k9la/>.

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 August 25 through 31 were 97, 76, 63, 73, 66, 89, and 121, with a mean of 83.6. 10.7 cm flux was 104.2, 104.6, 103.8, 101, 101.2, 101.3, and 109, with a mean of 103.6. Estimated planetary A indices were 4, 3, 5, 6, 9, 4, and 2, with a mean of 4.7. Estimated mid-latitude A indices were 4, 3, 3, 4, 7, 2, and 1, with a mean of 3.4.  
NNNN /EX

### 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***



## Bits and Pieces

### SIGNAL AND AUDIO REPORTS

Have you ever asked for an audio report? Sure you have and I'll bet you got conflicting reports. It seems that some hams are careless in giving audio reports. You can hear it almost daily. In most cases the first report will be a help to the ham asking. Then comes more reports such as "You sound good to me old man" or "There is nothing wrong with your audio". Does that sound familiar? Unfortunately we have people in the ham community that shouldn't give audio reports. To some hams the idea of the louder, wider, and more processed and equalized (super- wide- bander) the audio the better it is. There are others that like original out of the box audio.

Before asking for help with your audio you might check to see if your processor is on or the mic gain is set according to the manual tune up procedure. You should also have an extra mic to try. Most audio problems are caused by hams trying to get more from the radio than it will produce. Also, if you are one who likes to sound like you are in a broadcast studio consider the affects it may have 3kc ( or more) up or down the band. I can assure you if you are one of these single-wide-banders you will be the first to squawk about someone getting to close to you on the band because of your awareness of interference caused by such operating practices. It is better to have a good antenna than it is to try to push loud, wide, and over processed audio into an antenna that is insufficient.

Signal reports are heard daily the same as audio reports. You will hear someone ask for a signal report and the responses are all different. The classic one is "you are S 10" or "S 20". Not only is the signal S 10 or S 20 but in the next response the station giving the report will say " can you repeat that". For starters the report should have been 10 over S9 or S9+10. Then there is the guy that will tell someone they are unreadable when actually they sound pretty darn good. Be honest. It won't hurt at all. If signal reports are given accurately it can help solve problems with antennas and radio tuning or repair. Allot of us can't afford expensive test equipment and rely on fellow hams and there expertise. Something needs to be said about S meters: With a few exceptions, they're inaccurate, nonlinear and of dubious calibration. Most S meters are just for reference not accuracy.

### Items for Sale

Kenwood TR-7800 transceiver 143.900 – 148.995 5/25 Watt (no PL) \$25.00

MFJ 1724B 2M/440M dual band mag mount antenna. \$10.00

Ground Cable 1 7/8 wide 50 foot braided cable with plastic covering. (Was used for computer mainframe grounding.) \$30.00

See Gene KA9BOD

### W9DXCC

The W9DXCC program list at <http://w9dxcc.com/program.html> is now complete, reflecting the addition of a couple of programs. We have a great program, several vendors, QSL checking, lots of nice prizes, a CW copying contest, a super banquet with ARRL President Kay Craigie, N3KN, speaking, and two hospitality suites.

The convention is now only a little more than three weeks away but you can still get the early registration discount. The convention itself is \$35, but you can attend the banquet for an additional \$25. The hotel has a special convention rate, making it easy to attend Friday night as well as Saturday. Full details are available on the website, <http://www.w9dxcc.com>.

The convention is a great opportunity to see your friends and make new ones. Incidentally, for those in the Chicago area, the Northern Illinois DX Association, the club sponsoring W9DXCC, has several membership slots open

## Hamfest Information

### **Belvidere Hamfest Chicago FM Club 9/10/2011 to 9/11/2011**

Boone County Fairgrounds— 8711 IL Rte 76 Belvidere, IL  
<http://chicagofmclub.org>  
Talk-in 146.760 (PL 107.2) & 146.550 Simplex;No PL  
Contact; Donald Wondolowski W9DMW  
Phone 630-908-2082  
E-mail [cfmc.radioexpo@yahoo.com](mailto:cfmc.radioexpo@yahoo.com)

### **Peoria Superfest 2011—Peoria Area Amateur Radio Club 9/17/2011 to 9/18/2011**

Exposition Gardens—1601 West Northmoor Road, Peoria IL  
<http://www.peoriasuperfest.com>  
Talk-in 147.075+ (PL 103.5)  
Contact; John Coker N9FAM  
Phone 309-369-7428  
E-mail [n9fam@comcast.net](mailto:n9fam@comcast.net)

### **Milwaukee Repeater Club Hamfest 11/05/2011**

Elks Lodge #46—5555 West Good Hope Road—Milwaukee WI  
<http://www.mrc91.org>  
Talk-in 146.910 (PL127.3)  
Contact; Ken Jaeger KC9MXZ Phone 414-491-0686

## Submission from Dennis Johansson

There is a neat Ham Radio Program on the internet called HAMNATION. I see it is being advertised on <http://www.arrl.net>. The program is one hour long, and is a weekly program. This is a good program for the beginner and a refresher for the older ham. Neat projects like antenna building, power supplies and general Ham talk with hosts Bob Heil (K9EID), Gordon West (WB6NOA) and newly licensed TV Talk show host Leo Laporte (W6TWT) The video can be played online or downloaded in low or high resolution.

## The DX'ers Code of Conduct

### THE DX'ERS CODE OF CONDUCT

I will listen, listen, and then listen some more.

I will only call if I can copy the DX station properly.

I will not trust the cluster and will be sure of the DX station's call sign before calling.

I will not interfere with the DX station or anyone calling him and will never tune up on the DX station's frequency or in the QSX slot.

I will wait for the DX station to end a contact before I call him.

I will always send my full call sign in PHONETICS.

I will call and then listen for a reasonable interval. I will not call the DX station continuously.

I will not transmit when the DX Operator calls another call sign other than mine.

I will not transmit when the DX Operator queries another call sign other than mine.

I will not transmit when the DX Operator calls other geographical areas other than mine.

When the DX Operator calls me, I will not repeat my call sign unless I think he has copied it incorrectly.

I will be thankful if, and when, I do make a contact.

I will respect my fellow hams and conduct myself so as to earn their respect.

I will never call CQ DX knowing it excludes answers from stations not able to afford better equipment



P.O. Box 8465, Rockford, IL 61126

Website: [www.w9axd.org](http://www.w9axd.org)

E-mail: [jholich@comcast.net](mailto: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

# September 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