



# Arc Over

May, 2010

Fox River Radio  
League  
PO Box 673  
Batavia, IL  
60150-0673

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## President's Traffic

By John Spasojevich AG9D

On Wednesday the 13<sup>th</sup> of April our club began a new chapter in its history as we met for the first time at St. Rita of Cascia in Aurora, IL. Our meeting was attended by 55 members, we conducted a 30 minute business meeting, had a nice 20 minutes worth of social time at the break and listened to a very interesting program about RFI conducted by our guest speaker Brian Cramer, W9RFI. That was the official meeting. Some members continued with what I affectionately call the "parking lot stand around" or the "meeting after the meeting" having conversations in the parking lot with the last of us departing around 11:30PM. The feedback so far has been very positive. We're looking forward to cultivating a great relationship with our hosts and I would like to thank Mike, K9FE for his generous donation of two wireless routers, one for the Community Center and one for the meeting space. These are available for our use as well as the parishioners, students and administration.

May brings us closer to Field Day on June 25<sup>th</sup> & 26<sup>th</sup>. I know Eric AB9OS is working hard on the plans. This year he is joined by Adam KC9ITG fresh off his tour as net coordinator, now taking on the role I like to refer to as "Field Marshal." Remember that Eric is due to become a dad again right around Field Day weekend, so Adam will be providing much needed support and direction in carrying out the committees design, I know he will appreciate our cooperation in making Field Day a great success. The committee is rounded out by Dick AH6EZ once again providing his wonderful technical expertise and Becky KB9UBU providing her skill and excellence in seeing that the participants are well fed. Happy tummies make for happy hams! Lets also remember to pitch in and help her with clean up. It's a big job and no one should have to do it alone. The Band Captains this year are: 20 CW - Larry W9OKI & Chris KC9IEQ; 40 CW - Kermit W9XA; 80/15 CW - Warren K9IH; 20 SSB - Dick AH6EZ; 40 SSB - Dean KC9EOQ; 80/15 SSB - Dick W9IV; VHF - Bill WB9LPW; GOTA - Dawn KC9LQS and Jeff N9JZN. Thank you all for your time, talent and equipment. That said, these guys cannot do it alone, please consider coming out and helping to operate. The more participation, the greater the success we share in.

If you have been checking the club website: [www.frri.org](http://www.frri.org) or our yahoo group, reading this newsletter or checking in to the weekly 2 meter net, you know we have several opportunities to help with public service events. On June 5<sup>th</sup> Kendall County ARES is in need of help with the Sweetness Run contact Chris, KC9BKS to lend a hand. The Fox Valley Park District has asked for our help with the Mid-American Canoe Race, which takes place on June 6<sup>th</sup>, please see Tobi K9TCD if you can help out. On the weekend of June 12<sup>th</sup> & 13<sup>th</sup> Du Page County ARES is looking for help with a massive bicycle event known as Tour de Farms. Contact Kent W9NDW if you can assist. Also the same weekend on Sunday, June 13 the American Diabetes Association Tour de Cure bike event is taking place, please contact Eric K9LGE if you can help out.

As you read this, we will have completed the Fox Valley MS Walk event, which our club has assisted with for many years. Thanks to everyone who helped out and thanks to Michelle KC9HDB for organizing this. Looking farther into the year our Hamfest and Cougars Night will be taking place in July. We always can use a hand with the Hamfest. Ask Dean KC9EOQ how you can help and if you need tickets to the Cougars game, just ask Ken N9WCX.

*(Continued on page 3)*

**Minutes of the Regular Meeting of the General Membership of the  
Fox River Radio League (FRRL) an Illinois not-for-profit Corporation  
Held at Rasmussen College, Aurora, IL**

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Meeting Minutes April 13, 2010.

Meeting called to order at 7:30 PM by John Spasojevich – President with 60 members, 2 new visitors present present.

- Father welcomed us to St. Rita of Cascia as our new meeting place.
- Dick AH6EZ introduced Brian W9FRI, our presenter for the evening.
- **Secretary Report:** Bill W9WRS– meeting minutes available on Web and Arc Over. Motion to accept Mike K9FE, 2<sup>nd</sup> by Denny W9HI. Minutes accepted.
- **Treasurers Report:** KC9EOQ
  - Checking: \$ 2453.39
  - Savings: \$ 5266.93
  - Petty cash: \$80.00
  - Total Investments \$16,773.55
  - Total Assets: \$25,573.87
  - Repeater fund: \$3992.20
- John AG9D announced that the following are open positions: PR chairman. If anyone is interested, contact any board member.
- Upcoming events:
  - Sweetness Run May 15, 2010
  - Tour De Farm June 12-13, 2010
  - Tour De Cure June 13,2010
  - Field day
  - Cougars Night July 16, 2010. Tickets are \$10.00

**Committee Reports**

**Linux SIG:** Mike K9FE. Next meeting is April 17, 2010, 9:00 – 12:00 – Rasmussen.

**Software Defined Radio SIG:** Harry K9DXA. Next meeting is May 1, 2010, 9:00 – 12:00, at Rasmussen College.

**Program:** Tracking down RFI. May-AH6EZ DXpedition. June – Field Day

**VE Session:** Next session April 18, 2010, St. Rita of Cascia Church.

**Net Control:** Dawn KC9LQS – New net control chair. Needs net ops for 2010. Thanks to KC9ITG for his work over the past 3 years.

**Website:** Greg N9CHA is the new webmaster.

**Field Day:** Eric AB9OS – Will be on the 4<sup>th</sup> weekend in June, 2010 at the F. O. P. Lodge in Sugar Grove. Introduced band captains.

**Scout Activities:** K9DXA – May 15 at Cantigny, we will have sideband, cw, maybe an Ariss contact.

**Member Announcements**

Dick W9GIG – New ARRL websites is up..

Marty N9NTM – Announced upcoming HamFests.

WA9N has an antenna for sale.

**New Business**

The May 4, 2010 board meeting will be at St. Rita of Cascia in Aurora, IL.

The May 11, 2010 General meeting will be at St. Rita of Cascia in Aurora, IL.

The June 1, 2010 board meeting will be at St. Rita of Cascia in Aurora, IL.

The June 8, 2010 General meeting will be at St. Rita of Cascia in Aurora, IL.

Motion to adjourn by Marty N9NTM, 2<sup>nd</sup> Mike K9FE.

General meeting adjourned at 8:05 PM.

Respectfully Submitted:

Bill Stamps W9WRS

FRRL Secretary

## May Program Notes

The May club meeting program will be a 1989 video of AH6EZ and KB9UBU Micronesian DXpedition (and scuba diving pictures) to Yap, Palau, Pohnpei and Truk, and a presentation on how preparation for an expedition has changed since 1989.

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### New Members

Welcome to the Following New Members:

CALL	NAME
KC9RVP	James Martin
KC9RGF	Scott Martin
KC9RVQ	Julika Potter
KC9RVR	Tony Smith
KC9PHX	Tom Saballus
KC9ROW	Larry Smith

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*President's Traffic (Continued from page 1)*

Keeping things running takes a lot of people making contributions. One person who helps us every month is Vicki KC9PWM. She provides the coffee and donuts for our meetings. When you see her say thanks and remember the refreshments are not paid for by the club, so please make a contribution.

With the improving WX it's time to look for some DX and what better way to enjoy both than the FRRL Radio In The Park event. Radio In The Park was started last year at the suggestion of Bill NF9D as a way of encouraging outdoor operation. The concept is to "work all forest preserves". Just pick one and post a note on the Yahoo Group or give a call on the repeater if you'd like company. Also as some intrepid hams discovered last year, Kane County might not care what you are doing with that wire in their tree, but DuPage may think you need a permit so check into that so you don't run into trouble.

I had a chance to do some reading this month and I wanted to share a couple of things with you. First, I am pleased to announce that Joe NA9A came in first place in the 9<sup>th</sup> call area of the 10-10 Winter Phone Contest this past February. Bill N9ASC was second and Eric AB9OS was fifth. The high score overall was 277 points so the action wasn't wild and woolly but that's 10 meters at this point in the solar cycle. It takes perseverance to stick it out when conditions are poor. Congratulations guys!

The second thing I read was in the April edition of CQ. There is an article about ham operations in totalitarian regimes. It's nothing new to read stories about someone who was imprisoned in some dictatorship for one thing or another. However, I was both amazed and saddened to learn that fellow amateurs have been arrested and imprisoned and possibly tortured over the years for doing nothing more than what we take for granted, working DX. A knock on the door could be the police coming to confiscate your equipment. It's hard to believe and it makes some of the issues we think of as a "big deal" seem pretty unimportant. For me it's an example of how much we take things for granted. There were hams literally hiding their stations, hearts pounding every time there was a knock at the door. Comparing that with the difficulty we have sometimes getting hams to volunteer for events reminds me of something my brother-in-law told me. He's German and lives in a small town near Bonn. In talking about some of the differences between our cultures, he said, "John, in America you suffer from too much freedom." Sometimes I think he's right.

## Bill Erickson HF Challenge Update – Mid-April 2010

By Eric Needles, AB9OS

It's not even half way through the year and we already have some good competition going for the 2010 HF Challenge. Take a look at the totals in the limited category. Jeff K9BQL jumped on top with CW, passing the leader since the beginning of the year Larry K9ARZ on Digital. So who has the advantage? Larry has already worked all 50 states so he'll have to build his score with DX. Jeff has only worked 17 states. Stay tuned to find out what happens!

Skip ahead to QRO class and we see Jack K9JE put up a big score this month and is quickly gaining on last year's QRO class winner Dick AH6EZ. A great example of how each year is a clean slate and anything can happen.

Speaking of anything can happen, look at the Operator Class. This is really up for grabs. Almost everyone had bigger numbers this month and there are only a few points between many ops. Going into summer, things are really going to heat up!

If you really want to win an award, get on the air and start having QSO's of at least 10 minutes. There is still plenty of opportunity for anyone to win the Rag Chew Category. That's it, so get on HF and have fun! Now for the numbers...

Limited Class	States	Provinces	DX Countries	Total
K9BQL-CW	17	8	145	170
K9ARZ-Digital	50	9	103	162
K9MMS-CW	50	9	79	138
AB9OS-CW	38	3	57	98
NF9D-QRP	21	2	41	64

Operator Class	States	Provinces	DX Countries	Total
W9DTR	50	9	91	150
N9YA	29	8	70	107
K9TCD	42	6	51	99
KC9LQS	36	5	54	95
WB9CHY	36	4	52	92
KC9EOQ	35	5	47	87
W9IV	18	3	60	81
K9IH	24	6	37	67

QRO Class	States	Provinces	DX Countries	Total
AH6EZ	50	12	179	241
K9JE	41	11	157	209
KC9DAO	34	4	89	127
N9JZN	32	4	65	101
NA9A	7	1	21	29

Ragchewer Class	States/Prov.	DX Countries	Total
W9DTR	22/3	12	37
AH6EZ			33
K9IH	6	6	12
N9YA	10/1	1	11
AB9OS	6	0	6
NA9A	4	2	6
K9JE	1	1	2

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## ZS6BKW, An All-Band Antenna for Short Lots

By Larry Stark, K9ARZ

Are you troubled by limited space for antennas? Do your neighbors look askance at those beautiful aluminum structures we've all come to know and love throughout these many years? Would you like to put up a relatively inexpensive antenna that will yield good-to-excellent results on many bands? Then, the antenna for you may be the ZS6BKW.

The ZS6BKW antenna was the brainchild of Brian Austin, G0GSF (ex-ZS6BKW) while he held the South African call sign. He was intrigued with the G5RV antenna (designed by Louis Varney), but wanted an antenna that would be usable on more bands with a lower SWR. The idea was for the transmission line to act as an antenna tuning section as well as part of the antenna itself. It has been modeled with EZNEC and the results have shown the antenna to be quite "radio friendly" with low SWR characteristics on many of our favorite bands.

Figure #1 is a pictorial diagram of the ZS6BKW antenna, which is constructed in a fashion similar to the famous G5RV Antenna. It appears similar to a "doublet" antenna fed with 450 Ohm balanced feed line that terminates directly into coaxial cable without an impedance matching balun. When putting the antenna together, I would recommend terminating the 450 Ohm line into a 100 ft length of RG-8/U, RG-213 or LM-400 cable. This length provides optimum de-coupling of the transmission line and it would be advisable to coil up as much excess as possible to serve as a "choke balun" to prevent RF from entering the hamshack. The larger size cable also keeps loss to a minimum. In constructing the antenna, the top section (90ft overall in length) is made with #18 gauge steel copper weld wire obtainable from AES in Milwaukee or any welding supply house. I like the light gauge wire as it maintains a low profile, being barely noticeable, and it is very strong and does not stretch as soft drawn copper wire might.

Figure #2 is a table of readings taken directly off my antenna connected to an MFJ-259B antenna analyzer. The readings indicate that a number of bands are useable without an antenna tuner with SWR readings be-

low 2:1. The actual readings taken off an SWR bridge connected to my TS-2000 are lower than those with the MFJ device. With an antenna tuner connected between the antenna and the transceiver, a perfect 1:1 SWR was possible on all bands shown on the chart (including 80 meters with its 5:1 SWR). The internal tuner in both the Kenwood TS-570D/G and the TS-2000 easily handled the SWR on all of the bands shown. According to the inventor Brian Austin, EZNEC modeling shows that at 51 MHz, the antenna is capable of 12dbi gain with four major lobes at 20 degrees to the wire, for the 6-meter users.

My ZS6BKW antenna has been in use here for over 25 years and has worked many Europeans and Russians on 80 meter SSB/CW & PSK. Although my antenna is arranged as a double inverted vee (meaning it is high in the center and low on the ends, and there is about a 90 degree angle between the legs on a horizontal plane), it can be laid out in any convenient fashion without greatly affecting the SWR or performance.

I have used it on 2 meters where it shows a very nice match at 146.52 MHz. It may not be the best 2 meter antenna around, but it will work there. A good friend of mine also used the ZS6BKW as their only antenna during a DXpedition to the Turks and Caicos Islands and had no trouble stirring up hundreds of contacts on all continents. Therefore, if you have limited space and need a simple antenna that can be used on a number of bands, you might give the ZS6BKW a try!

Figure #1

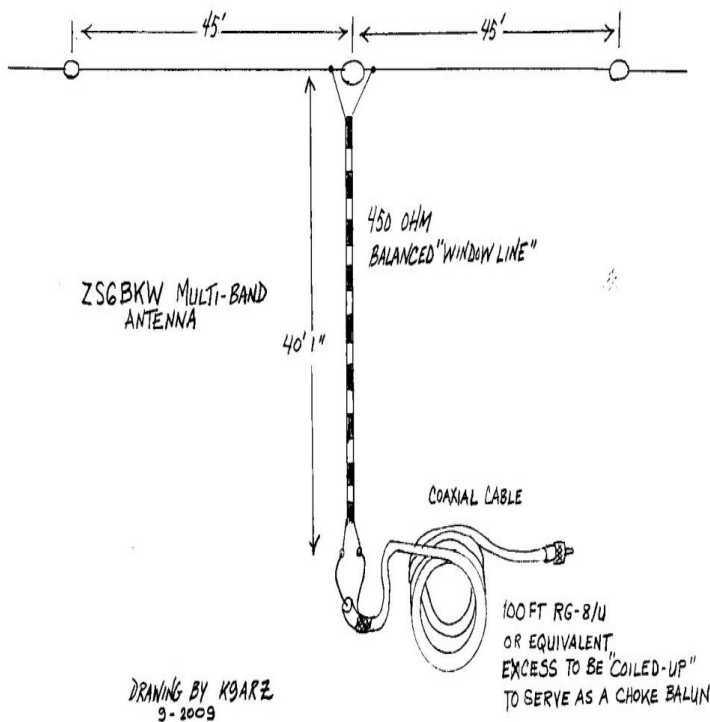


Figure #2

**Table of SWR readings by Frequency using a ZS6BKW Antenna**

3.6 MHz-----	5.2:1
7.1 MHz-----	1.4:1
14.25 MHz -----	1.5:1
18.15 MHz-----	1.5:1
21.25 MHz-----	7.5:1
24.90 MHz-----	2.5:1
29.15 MHz-----	1.4:1
51.00 MHz-----	1.5:1
146.52 MHz-----	2.6:1

Measured using an MFJ Model 259B Antenna Analyzer connected directly to the antenna coaxial cable with no tuner in line.

## About the FRRL

The Fox River Radio League, Inc., is a general interest amateur radio club serving the central Fox River Valley area. Records indicate the club has been in existence since at least 1924, and has functioned continuously ever since. We are an ARRL Special Service Club, an Illinois not-for-profit corporation, and a 501(c)(3) tax exempt organization as specified in IRS Statutes.

We sponsor training classes for new hams, license examination sessions, an annual hamfest, and participate in various public service events. If you have a specialized amateur radio interest, chances are you can share it with one or more of our club members.

The Fox River Radio League meets on the 2nd Tuesday of every month at St. Rita of Cascia Church in Aurora. The meeting begins at 7:30 PM. After conducting busi-

ness, coffee and snacks are served while we socialize. Following the break, a program of interest will be presented.

All persons interested in amateur radio are invited to attend. Families are welcome.

*We hope to see you there!*

## License Exams

The Fox River Radio League, Inc., in conjunction with the ARRL VEC, conducts amateur examinations on the 3rd Tuesday of January, March, May, September and November at Rasmussen College, 2363 Sequoia Drive, Aurora, IL, at 7:30 PM. A special session is held at the club's hamfest, usually in July each year. No advance registration is required, but please be sure to bring your license (if you

have one) and a photocopy of it, some form of photo identification and the fee of \$15.00. (The FRRL receives no portion of this fee.)

**The next exam session is scheduled for May 18, 2010 Rasmussen College. A venue change is possible, please check the [frri.org](http://frri.org) website for updates.**

## FRRL Dues

Annual dues are payable no later than the January Club Meeting each year. New members joining during the year will have their first year's dues prorated to the nearest yearly quarter.

Regular dues are \$20.00 a year, Senior Citizen dues are \$12.00. Family dues are \$30.00. Members can help support the FRRL Repeaters by making an annual \$10.00 donation.

Check with the Treasurer for details and additional dues rates.

## Nets

Net Name	Freq.	Day	Time
FRRL	147.210	Tuesday	7:30 PM Local
10-10 CW	28.150	Monday	8:00 PM Local
10-10 SSB	28.720	Monday	8:30 PM Local

## Fox River Radio League

Founded 1924

### Mailing Address:

Box 673  
Batavia, Illinois  
60510-0673

### Email:

[info@frri.org](mailto:info@frri.org)

### Web Site:

<http://www.frri.org>

### President

John Spasojevich AG9D

### Vice President

Harry Jones, K9DXA

### Secretary

Bill Stamps, W9WRS

### Treasurer

Dean Holste, KC9EOQ

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Dick Illman, AH6EZ

Larry Shaw, W9OKI

Larry Stark, K9ARZ

### Past President

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### License Trustees:

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FRRL CLUB MEETINGS ARE HELD AT RASMUSSEN COLLEGE, 2363 SEQUOIA DRIVE IN AURORA, BUT LOCATION IS SUBJECT TO CHANGE. PLEASE CHECK THE FRRL WEB SITE FOR THE ADDRESS AND A MAP TO THE MEETING LOCATION.  
<http://www.frri.org>

Send Address Corrections to:  
Fox River Radio League, Inc.  
3023 Scenicwood Lane.  
Woodridge, IL 60517

## FRRL Event Calendar

### May, 2010

BSA Signaling Class .....	1
SDR SIG .....	1
FRRL Board Meeting .....	4
FD Band Captain Meeting..	8
FRRL Meeting .....	11
VE Session .....	18

### June, 2010

FRRL Board Meeting .....	1
FRRL Meeting .....	8

## ArcOver FRRL Newsletter

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The ArcOver is published monthly by the Fox River Radio League, Inc. Articles and letters are always welcome. The normal deadline for material is the 20th day of each month for the next month's newsletter. Articles can be sent by email to [arc-over@frri.org](mailto:arc-over@frri.org) or via U.S. Mail. Contact the Editor for details and submission guidelines.

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## Local Area Repeaters/Nets

**W9CEQ—147.210 Mhz.**  
+600 KHz, 103.5 access tone  
Owned by FRRL

**W9CEQ—444.300 Mhz. IRLP Node # 4850**  
+5 Mhz, 114.8 access tone  
Owned by FRRL

**W9CEQ\_\_B D-Star—442.10625 Mhz (+ 5.0 Mhz offset)**  
**W9CEQ\_\_C D-Star—147.225 Mhz (-6.0 Mhz offset)**  
FRRL Digital Voice/Data Repeaters  
Contact W9XA for information

**KC9OEM—145.470 Mhz.** -600 KHz, 103.5 access tone  
**KC9OEM—444.525 Mhz** + 5 Mhz, 114.8 access tone  
**(2 meter is primary Kane Co. SKYWARN /ARES freq)**  
Owned by Kane County OEM

**W9DWP—Kane Co. Amateur Public Svc. Rptrs.**  
145.270 -600 KHz, 107.2 access tone  
443.025 +5 Mhz 114.8 access tone

**W9ZGP—NIARC**  
147.060 +600 KHz, 103.5 access tone

- Weekly ARES/Skywarn Net—Wed. Eve. at 6:30 pm local time on the KC9OEM 2 meter repeater
- Weekly FRRL Net—Tues. Eve. at 7:30 pm local time on the FRRL 2 Meter repeater.
- Monthly Simplex Net—4th Tues following weekly FRRL Net on the FRRL 2 Meter repeater.
- Illinois DStar Net - Wed. Eve. at 8:00 pm local time on the DStar 440 repeater.