



# Arc Over

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

December, 2005

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## President's Traffic

*by Dick Illman, AH6EZ*

This is a fun time of year for all of us in the ham radio world. Our antenna projects should be done and we can settle back in our warm ham shacks to work the DX or have rag chews on our HF bands using lots of digital or traditional modes.

Hopefully you are working on filling in some of the blank places in your HF Challenge score sheets. There will be a fun opportunity to listen to a Russian space suit sending voice and SSTV images during it's roughly 1 week journey from the space station to it's fiery end in the atmosphere starting December 7. We can also be preparing our Christmas wish lists. We can look forward to gatherings of friends and family as we enter the holiday season.

One of these gatherings is our annual Christmas Party organized by K9LU during our December meeting. Please remember to bring canned goods to the December meeting for our annual Hessed House donation.

Another of our fun gatherings to look forward to is our FRRL Banquet at the Fisherman's Inn on January 21. Check out the complete details on page 4. This is a nice social activity we can share with our spouses and get to know our fellow members and recognize the accomplishments of the FRRL and it's members over the past year. Please get with Kermit to purchase your ticket early. We have plenty of space this year and look forward to seeing all of the member and their friends, with nice music.

Dick Illman, AH6EZ  
FRRL President



## Erickson HF Challenge Update

By John Spasojevich, K9COE

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Another month as passed and things are still pretty tight in the QRO and Operator classes. Seems like it will come right down to the last QSO's of the year to find a winner. In the Ragchewing department, Gary-AL9A has a pretty good lead but it's not insurmountable. In the limited class, Bill-KB9YSI's QRP CW does have a commanding lead over my PSK31 score. I'm going to have to hit it hard and heavy to catch him!

Not much was reported for DX this time around - just a few like LA (Norway), 4J (Azerbaijan), 9K (Kuwait), J3 (Grenada), J7 (Dominican Republic), ZD8 (Ascension Island), TZ (Mali), PA (Netherlands), OH (Finland), OE (Austria) EU (Belarus), EA6 (Balearic Island).

Several new antennas have gone up since I took over the column, we had a report from Gary - AL9A on his new addition and this month (really from last month but I got the word too late to get in to press) is a report from Maurice - W4CEO in FL on his new antenna the Comet CHA-250B which was reviewed in QST a few months ago:

"I bought the Comet a couple of weeks ago. It's OK for a vertical. The one thing no one tells you about it is that the suggested height is 35 ft. which scared me, I thought that maybe they were using the tower as a counterpoise. I had it up about 5 feet and it played OK. What shocked me was the SWR...it was flat everywhere I checked it. I did do some comparisons with the Hamsticks I have and they were 1 to 2 S units better on receive.

That's it for now, keeping active on the bands not only maintains our presence on them, it hones your skills as an operator. As we all saw in Louisiana and Florida, it's not a question of IF, it's WHEN.

*Scores are on Page 5.*

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## FREE Item Notice

### **FREE**

CQ Magazine collection: Years 1989 thru 2000 Pick up at my house or at next FRRL meeting.

Call: Dick Isely, W9GIG at 630-584-3510

## Official Notification of Election Candidates for 2006

The following members have been nominated by the Nominating Committee or by the membership and their names will be on the ballot at the December regular meeting. The By-Laws allow for the election of write-in candidates.

President:	AH6EZ, Dick Illman
Vice President:	N9CHA, Greg Braun
Treasurer:	W9OKI, Larry Shaw
Secretary:	K9COE, John Spasojevich
Directors: *	
KB9UJB	Dick Anderson
K9FBI	Mike Bentley
N9YA	Keith Boatman
AB9IN	Tom Kmiotek
KC9FPD	Joe Machan
K9XP	Jim Nevitt, Sr.
KC9DAO	Charles Penninger

\*Members will vote for three candidates. The top two vote getters will each serve a two year term. The third place finisher will serve a 1 year term (completion of the N9CHA term).

(Note—if a write-in candidate is elected to the position of Vice President, Greg would continue as a director and the voting would be for only two director positions.)

Absentee Ballots are allowed. Such ballots must be prepared by the voter and delivered to any officer prior to the start of the December meeting. The ballot must be in ink, and must include the title of the office being voted on with the first and last names OR the callsign of each candidate. The completed ballot should be enclosed in a sealed envelope that is both printed and signed in ink with the first and last name of the voter.

Questions on election procedures should be referred to the current President prior to the meeting.

*You are invited to ...*  
*The FRRL Winter Banquet*

Where: FISHERMAN'S INN RESTURANT  
Route 47 and Main Street  
Elburn, Illinois

When: SATURDAY, 21 JANUARY, 2006  
Featuring music by the 16-piece Wayne Cook Orchestra

Cocktails and Conversation: 5:30 PM  
Dinner Served at: 7:00 PM  
Music from: 8:00 – 11:30 PM

Menu: There are four selections for the dinner with prices that includes the service gratuity and tax:

- # Prime Rib Dinner - \$35.00
- # Chicken Kiev - \$33.00
- # Vegetarian Lasagna and Salad - \$32.00
- # Fisherman's Inn Rainbow Trout - \$31.00

Please feel free to invite your friends and neighbors for an enjoyable evening of FRRL camaraderie and music!

Tickets are available by contacting Kermit Carlson W9XA at (630) 879-0983 or at the December meeting.



## Bill Erickson HF Challenge Scores—October

Here are the latest standings received for the HF Challenge, as of October 15. Remember to email your updates to challenge@frri.org by the 15th of each month.

Ragchew Class	States/Provinces	DX Countries	Total
AL9A	-	-	46
AH6EZ	-	-	34
K9COE	-	-	32
NA9A	-	-	17
N9CHA	-	-	9
W9DTR			7
K9FE	-	-	1

Operator Class	States/ Provinces	DX Countries	Total
W4CEO	48/8	119	175
K9JE	46/10	115	171
K9MMS	50/10	79	139
W9DTR	40/8	91	139
K9FBI	50/8	54	112
N9CHA	23/3	25	51

Limited Class	States/ Provinces	DX Countries	Total
KB9YSI	47/5	33	85
K9COE	18/3	27	48

QRO Class	States/ Provinces	DX Countries	Total
AH6EZ	50/12	166	228
AL9A	50/12	161	223
NA9A	33/3	177	213
WOHED	50/7	77	134
K9FE	15/0	4	19

## FRRL Club Nets

The regular weekly FRRL 2 Meter Net takes place every Tuesday evening at 7:30 pm local time, except on meeting nights, on the W9CEQ repeater, 147.210 MHz. +600 KHz, 103.5 access tone. The Next Gen Hams Nets take place on the 2nd and 4th Wednesday evenings of each month at 8:00 pm local time on the NIARC repeater, W9ZGP—146.580 MHz., +1.08 MHz. (147.660).

## Letters to the Editor

Dear FRRL-

Congratulations on 2nd place in 8A this year during Field Day. I had a ton of fun operating 80M with W9XA and I look forward to visiting you guys next year. When I first was licensed many moons ago, it was FD that got me interested in the HF bands. It was at FD that many of the FRRL members, past/present who taught me the skills I would need to become a proficient contester and operator. I was quite pleased to see that spirit alive and well at this year's FD. I hope that the Next Generation will look forward to Field Day as I do every year.

73 and Congrats on a fine finish FRRL!

Cedrick "Fred", K9YO/2

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## Solar Flux

*By Bill Muhr, KB9YSI*

I just have room here to wish everyone the happiest of holiday seasons and best wishes for the New Year.

Thanks to all for their contributions to the ArcOver during the past year!

Bill, KB9YSI

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## For Sale / Wanted

### Wanted:

**BT-5**, Battery case for Kenwood hand held series 215, 225, 315, etc. rigs. Contact: DJ, KF9OW, Phone 630-377-6892 or kf9ow@arrl.net. Arrangements: Do the deal before the Club Meeting, or toss out some other idea!

### For Sale:

**Emergency Heat!!** Sanyo kerosene stove. Single burner, electric ignition (batteries, not included). Small, no outside vent, hand carry to where heat is needed. Easy to store in the off season. Includes labeled fuel canister and about one gallon of kerosene. One only! You must act quickly! \$49.00 OBO. Contact: DJ, KF9OW, Phone 630-377-6892 or kf9ow@arrl.net. Arrangements: Do the deal before the Club Meeting. No extra trip.??!

## An Evolving Ground System

By Tom Davis, WB9CHY

Thanks to the kind assistance of Greg, N9CHA, I recently set up a 2M vertical on the side of my house and installed 2-inch PVC to allow feedline entry to the shack. Although it worked well, I was anxious to put a surge protector on the coax, which then caused me to rethink the grounding/feedline system I currently had in place.

My 9 year-old RG-8X cable to the backyard HF vertical still worked but was probably due for a replacement. I had run it through the side of my house (with the use of a long ¼ inch drill bit) to a common ground point (CGP) via a Polyphaser surge protector *inside* my basement shack. My ground wire (aluminum solid conductor) exited the shack through a second hole.

I wanted to accomplish the following improvements:

- 1) Move the protectors outside to draw off part of the charge before it ever enters the house.
- 2) Use braid rather than a single conductor for both the protector assembly and the CGP (I know that the use of flat copper ribbon is highly regarded, although I felt it would be difficult to work with, both in clamping it to the ground rod and in being able to fit in alongside of at least 3 cables through the PVC pipe).
- 3) Add some coax switches to the CGP to allow easily disconnecting the feedline from the rig and grounding it when not in use. The previous routine of simply connecting and disconnecting it was taking a toll on the threads on the antenna tuner jack.

I decided I would assemble an outside enclosure for the surge protectors and hang it from the antenna mast on the side of the house. I ordered an 1/8" copper panel kit and matching waterproof NEMA 4X box to house it. For the inside of the shack, I acquired a Polyphaser CU-SPGP common ground point kit. In addition to the HF and UHF Polyphaser protectors, I added a second HF protector for a future antenna (6M?).

I've included some pictures of the inside CGP and outside surge protector assemblies. See the next page for the photos.

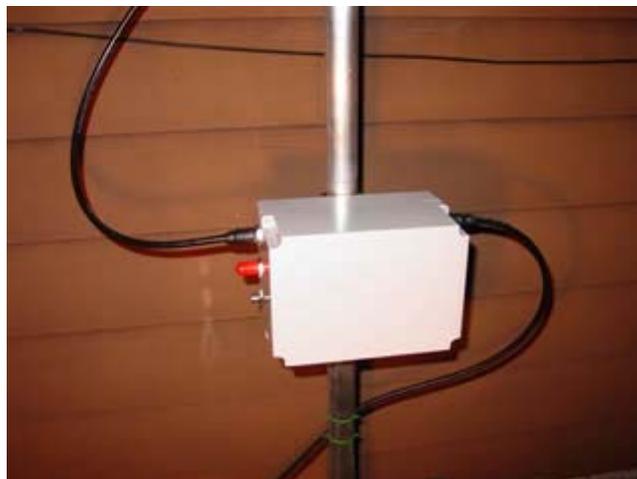
Any good project will also be a teaching experience. I learned that enlarging holes in the plastic NEMA box from 1/4-inch (my largest drill bit) to 1/2-inch in order is not easily accomplished by using a Dremel grinding bit (the plastic heats, flows and re-seals). Larger nuts on the outside of the box cover the imperfectly round holes! However, the same tool made a dandy slot for feeding through the 1-inch grounding braid.

I was embarrassed to learn that N-type connectors would have been the better choice for this project (and definitely for the UHF line), but I'll leave that for a future enhancement. And if you must use UHF connectors, please get Amphenol or another quality brand—the silver-plated hamfest specials I used had center pins that barely accepted the center conductor of the coax.

Does it work? Well, regarding the surge protection, I can only hope that I never have to find out, but I do feel the shack is a little better protected. Some combination of newer, low-loss coax and a cleaner ground system may have improved HF reception (although the conditions may also just have been better, recently). Measuring the SWR with an MFJ antenna analyzer did not show any improvement in SWR (nor was I expecting any). The 2M FRRL repeater now comes in 60db-over-9 (first time I've ever needed to use the attenuator on the '706).

# Evolving Ground Photos

Photos by Tom Davis, WB9CHY



## Foolish or Fun? (QRP in the HF Challenge)

By Bill Muhr, KB9YSI

Back in January, as I was thinking about my plans for the 2005 Bill Erickson HF Challenge, I stumbled on a website maintained by John Shannon, K3WWP (<http://home.alltel.net/johnshan/>). John writes the QRP column for the FISTS Club newsletter, and is a dedicated QRP operator. In fact, John has made at least one QRP CW QSO every day since August 5, 1994. As of November 30, 2005, John's streak of daily contacts stood at 4,136 days and 42,841 QRP QSO's with 12,861 of the those being DX. And he's done all of this with wire antennas in his attic. When I saw what was possible with QRP I decided to give it a try myself and spend 2005 working as a QRP station.

So how did it work? Surprisingly well, if I do say so. So far this year (as of 12/15) I've made 557 QRP contacts. Most of my contacts were made during various contest events, but I also did a fair amount of casual operating. Of the total, 505 were CW contacts. Most of the 52 SSB contacts were made during the IL QSO Party.

During the year I worked 48 states, missing only Alaska and Mississippi. I also managed to contact 5 Canadian Provinces and 33 DX entities (according to the HF Challenge Scoring Rules). Right now that record puts me in first place in the Limited Class for the Challenge.

I worked most of my states on 40 meters, (42), with lesser numbers on 20, 80 and 15. Ten meters was not productive for me — I only managed to work 2 states there. For DX, 20 and 15 were the most productive bands. I worked 16 countries on 20 meters, and 13 on 15 meters. I did manage a few DX contacts on 10 and 40, and caught a couple of Provinces on 80. My best DX was a Q with Japan on 15 meters, which qualified me for the 1000 miles/watt award.

Most of my contacts were made with my primary contest radio, an Icom IC-746, running 5 watts to my Gap Challenger vertical antenna. I also have a G5RV antenna, but I found it much less effective for QRP work. (Strangely, when I switch to high power the G5RV often works better than the vertical.) I also used my Yaesu FT-817 mini rig for a number of contacts. My favorite summer evening activity was to take the 817 out on the back deck, attach a 48 inch MFJ whip antenna, and work FISTS CW Club members late into the evening.

While I really enjoyed the summer evening operating, my most productive times were during contest weekends. The North American QSO Parties was the best, since the rules for those two contests limit power for all stations to 100 watts or less. Since there were no high power boomers to drown out my signal, I was able to run stations effectively during the NAQSOP contests. For hunting DX, the ARRL DX Contest and the CQ Magazine CW WW and Prefix events worked pretty well. All of these major contests provided lots of stations for me to work.

I also took part in a number of QRP specific contests. I enjoyed these, but compared to the "major" contests, there were not as many stations on the air that I could hear and work. However, the QRP folks were very friendly, gave honest signal reports, and always worked very hard to dig my weak signal out of the noise.

*(Continued on page 10)*

## QRP in the HF Challenge

(Continued from page 9)

Speaking of honest reports, most of mine were 599 "contest" signal reports. However, I did get a lot of 449 and 339 reports during my casual back porch contacts. My all-time favorite was the CW QRP operator who sent me a "339/QSB/QRN" report and then asked if I could turn *down* the power.

So what did I learn in 2005? I think the major lesson is that you can have fun and make a lot of contacts running QRP. However, you must be prepared to spend most of your time on CW, and spend a *lot* of time and effort chasing DX. I think I learned a bit about operating and how to time my calls in order to have a better chance of being heard. And I learned that there are times when you just are not going to get through to a station (can you say Kure Island?) and it's best to shut down the shack and go do something else rather than get angry and frustrated.

I also found out that Phone QRP simply doesn't work very well unless you have a really good antenna system. For example, the November Phone Sweepstakes Contest was a total wash-out for me. I just couldn't be heard underneath all of the high-powered wide bandwidth signals out there.

I can also say that my CW skills are better now than they were in January. I didn't make as much progress as I would have liked, but I am more confident that I have the calls correct on first hearing. I also have enough confidence to try running stations at a reasonable speed (20 wpm or more) during a busy contest. In January my running took place in the wee hours of the night when I knew I'd only get one station at a time to respond to my slow speed call and I could blame fatigue for my lack of copying skills at 15 wpm.

So, is QRP operating right for you? It's hard to say. If you enjoy a challenge, want to test your skills and have a good bit of patience, give it a try. If you do, I think you will find that the rewards are pretty special. There is nothing quite like sneaking into a mob of kilowatt commandos with your tiny QRP signal and snatching a DX contact out from under their noses using your great operating skills (and having some luck, too).

I guess the final question for today is, will I continue to focus on QRP or will I cave in, join the "More Goo Gang", and go buy myself an amplifier? Right now I'd have to say that I'm going to stick with QRP. I probably won't be as reluctant to turn up the power as I was this year, but I certainly won't revert to "full power all the time" mode either. I simply had too much fun tapping out code and being amazed at how far my tiny little 5 watt signal could go.



The QRP Ham Shack

## 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©(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 the Prisco Community Center in Aurora, Illinois. The meeting begins at 7:30 PM. After conducting business, 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 in the basement of the Prisco Community Center, 150 W. Illinois Street, (South East corner of Lake and Illinois) in Aurora, IL. at 7:30 PM. No advance registration is required, but please be sure to

bring your license (if you have one) and a photocopy of it, original CSCEs and a photocopy (if needed), some form of photo identification, and the fee of \$14.00. (The FRRL receives no portion of this fee.)

The next exam session is scheduled for January 17, 2006, at the Prisco Community Center in Aurora, IL. At 7:30 pm

## FRRL Dues

Annual dues are payable no later than the January Club Meeting each year. Persons 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. You can also help support the FRRL Repeaters by joining as a combined Club/ Repeater member for \$30.00. Repeater dues are \$20.00.

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:

mail@frri.org

### Web Site:

<http://www.frri.org>

### President

Dick Illman, AH6EZ

### Vice President

Kermit Carlson, W9XA

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John Spasojevich, K9COE

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### License Trustees:

Kermit Carlson, W9XA  
Bob Dillon

### Newsletter Editor

Bill Muhr, KB9YSI  
arclover@frri.org

### Webmaster

Tom Davis, WB9CHY  
webmaster@frri.org

**FRRL CLUB MEETINGS ARE HELD AT THE PRISCO COMMUNITY CENTER AT 150 WEST ILLINOIS STREET IN AURORA. PLEASE CHECK THE FRRL WEB SITE FOR A MAP TO THE MEETING LOCATION .**

<http://www.frri.org>

Send Address Corrections to:  
 Fox River Radio League, Inc.  
 40W981 Bridle Creek Drive  
 St Charles, , Illinois  
 60175

## FRRL Event Calendar

### December, 2005

Skywarn Recognition Day ... 2/3  
 FRRL Board Meeting ..... 6  
 FRRL Holiday Party ..... 13  
 Christmas ..... 25  
 New Years Eve ..... 31

### January, 2006

FRRL Board Meeting ..... 3  
 FRRL Meeting ..... 10  
 VE Testing ..... 17

## Handy Web Links

<b>FRRL Web Site</b>	<b><a href="http://www.frri.org/">http://www.frri.org/</a></b>
ARRL Main Site	<a href="http://www.arrl.org/">http://www.arrl.org/</a>
ARRL Central Div. Site	<a href="http://www.central.arrl.org/">http://www.central.arrl.org/</a>
ARRL IL Section Site	<a href="http://www.central.arrl.org/illinois.html">http://www.central.arrl.org/illinois.html</a>
ARRL IL Section News	<a href="http://www.arrl.org/sections/?sect=IL">http://www.arrl.org/sections/?sect=IL</a>
ARRL Contest Page	<a href="http://www.arrl.org/contests/">http://www.arrl.org/contests/</a>
Contest Calendar	<a href="http://www.hornucopia.com/contestcal/">http://www.hornucopia.com/contestcal/</a>
Callsign Lookup (QRZ)	<a href="http://www.qrz.com/">http://www.qrz.com/</a>
Vanity Callsign Info	<a href="http://www.vanityhq.com/">http://www.vanityhq.com/</a>
IRLP Main Page	<a href="http://www.irlp.net/">http://www.irlp.net/</a>
AMSAT	<a href="http://www.amsat.org/">http://www.amsat.org/</a>
FCC Services	<a href="http://wireless.fcc.gov/services/amateur">http://wireless.fcc.gov/services/amateur</a>
SMC Contest Club	<a href="http://www.w9smc.com/">http://www.w9smc.com/</a>

## 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 six days prior to the end of the previous month. Articles can be sent by email to [arcover@frri.org](mailto:arcover@frri.org) or via U.S. Mail. Contact the Editor for details and submission guidelines.

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## Happy Holidays!

**Season's Greetings to all from the Officers, Directors and Members of the Fox River Radio League**

## 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

**W9ZGP—146.580 Mhz. \*\***  
 +1.08 Mhz (147.660)  
 Owned by NIARC

**KC9OEM—145.470 Mhz.**  
 -600 KHz, 103.5 access tone  
 Owned by Kane County OEM

**W9XA — 224.40 Mhz, +5 Mhz, IRLP Node #4846**  
 — **443.65 Mhz, +5 Mhz**  
 — **1292.00 Mhz, -20 Mhz (1272.00)**

- Weekly FRRL Net—Tues. Eve. at 7:30 pm local time on the FRRL 2 Meter repeater.
- Next Gen Youth Ham Net—2nd and 4th Wednesdays of each month. On the NIARC repeater.
- KC OEM Amateur Net— Wed. Eves, 7:00 pm on the KCOEM repeater.