

Ham Radio in the School Room

By N9CHA Greg Braun

Let me share with you a typical phone conversation between myself and John, K9COE, during the Fall and Spring school semesters this past year. "Hi John, Greg. It's Tuesday, you have any good ideas for the Boulder Hill Ham Club this afternoon?" John replies, "Just get over here and we'll figure it out. I think I have got a couple of ideas, bring the radio, I've got the antenna, and bring your scope and microphone. I've got a box here we're going to cover with foil..." And so it goes.

After attending the FRRL club meeting last summer when Charlie, AJ9N presented to our members the details which go into an ARISS contact, John's imagination began to wander. It wasn't long after that I received a phone call from John asking me to attend a meeting with the Principal of the Boulder Hill Elementary School in the Oswego School District. John wanted to introduce his son's school to the possibility of making a radio contact with the Astronauts aboard the International Space Station. I found out John, like myself, is a big space buff. We both grew up enthusiastically monitoring the sub-orbital flights, full orbital missions, moon landings and space shuttles of the 1960's and '70's. A perfect vacation for both of us would include a tour of Cape Canaveral and especially the Saturn V exhibit.

John remembers the passion he felt during those early space adventure days and wanted to somehow share this with kids whose age was close to his own when bitten by the space bug. We both felt the excitement of introducing kids to the ISS and Amateur Radio. Shortly after our initial meeting, we were challenged by the Principal to come up with a curriculum to be presented twice a month to students of the 4th and 5th grade who might be interested.

Overwhelmed! Totally overwhelmed is the only emotion I can muster after seeing the 20plus students who signed up for our un-tried, un-proven and un-rehearsed club meeting. John and I had decided to have the kids make up code keys from tongue depressors, corks, buzzers and batteries. The session only lasted an hour, but both of us were drained, completely soaked in sweat and disoriented as the kids pleasantly marched past by us waving and chanting, "see 'ya next week!"

As the weeks went by, we kept our initial club roster of kids. We may have gained a few by the end of the first semester. By the second semester we were once again overwhelmed by the response we got... 30 kids! Now what do we do? Electronic fundamentals, radio propagation, electronic components, wave theory and many more topics were presented. Plus, we made contacts with ham radio operators both locally, nationally and internationally by setting up either an HF radio or VHF/UHF radio at each meeting.

At the July meeting we celebrated the successful completion of Field Day with 80 participants and 9 youths under 18 years of age. I know I had fun on 20m SSB tutoring two long time hams who had been off the air for 40 years or never operated a Field Day in 50 years of ham radio. With rebuilt RF cables, I had more success on the Satellites as well. Thanks to everyone who helped set it up, debug the various problems, operate the stations, and knock all the equipment down.

In July we celebrated the completion our major fund raiser, our own Hamfest in Aurora. We are waiting to see the full financial report, but at first glance it seems to have been worthwhile. For the first time in recent memory, we had a hidden transmitter hunt in the parking lot. I found that we had a lot of experts in tracking down the transmitter. I had to make it more difficult by putting the transmitter in my pocket and walking around. Even at that two guys found it.

By the time you have read this, some of you will have enjoyed a Kane County Cougars baseball game and fireworks. I hear that the Cougars lost, 6—5, but that a good time was had by everyone. Unfortunately I missed the game this year because we will be on a motorcycle DXpedition including Delaware, Rhode Island, W1AW, Vermont, New Brunswick, Prince Edward Island, Nova Scotia, Quebec, and Ontario. Hopefully some of you cashed in on guaranteed HF Challenge points. I am still missing VE4, VE8, and VY0 for the year.

August Program Note

For the August meeting, I am hoping to have good enough weather to tuned to 146.565. We will supply some aluminum foil tubes for attenuation and a couple of two element Doppler arrays so you can experiment with hunting the elusive fox. It does seem appropriate to have a *Fox* hunt on the grounds of the *Fox* Valley Park District building on the shore of the *Fox* River. If I were a really bad punster, I'd say that I hope none of you get out-foxed.

New Members

I'd like to welcome the following new members to the Club:

Chris Farley, KC9IEQ, Technician; Scott Miller, KB9LML, Technician; Mike (Michael J.) Rybinski, KC9ISA, Technician; Mike (Michael S.) Rybinski, KC9JBX, Technician; Bill Seaborn, N9ASC, Advanced. We're very glad to have you join us.

That's all for this month ...

73, Dick Illman, AH6EZ FRRL President

Technician Trivia

Selected from the new Technician Exam Question Pool

T3C02

What is considered to be proper repeater operating practice?

A. Monitor before transmitting and keep transmissions short

B. Identify legally

- C. Use the minimum amount of transmitter power necessary
- D. All of these answers are correct

Answer on Page 8

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 7:00 pm local time on the FRRL repeater, W9CEQ—147.210 MHz. +600 KHz, 103.5 access tone.

Other Area Nets

Kane County ARES nets take place on Monday nights at 9:30 pm on the KCAPS—W9DWP) linked repeaters (145.270 Mhz. -600, 107.2 access tone, and 443.025 Mhz. +5000, 114.8 access tone). Beginning August 14, the net will start at 9:00 pm. (For information, see the KC ARES web page at http://www.kanecountyares.org)

The Kane County Emergency Management weekly net takes place on Wednesday nights at 7:00 pm on the KC9OEM repeater, 145.270 Mhz., -600, 103.5 access tone. The Kane County OEM also runs SKYWARN weather nets whenever severe weather watches or warnings are in effect.

The City of Lights Chapter of Ten-Ten International holds an HF CW net on Monday nights at 8:00 pm local time on 28.150 Mhz., and a Phone Net at 8:30 pm local time on 28.720 Mhz. All hams are welcome. The CW Net participants are happy to slow down for any amateur wishing to brush up on their Morse Code skills.

Flash from the Challenge Administrator.....

For all DXers and Challenge participants - We have two new DXCC countries to chase!

Montenegro was recognized by the ARRL as a new DXCC entity on June 28th. Contacts with 4N3, 4O3, YT3, YU3, YZ3, 4N6, 4O6, YT6, YU6 or YZ6, on June 28th or later, count sep rately from the YU entity Serbia & Montenegro. The old Serbia & Montenegro is now just Serbia. A glaring exception is that contacts with the very active station YU6AO count as Montenegro only from July 4th and later. Contacts from June 28th to July 4th didn't count for DXCC because YU6AO wasn't licensed for HF at that time.

Swains (or Swain's) Island was also added by the DXAC as a new DXCC entity effective 0001Z July 22, 2006. This former American Samoa island qualified under the existing separation rule when its "Parent" country, American Samoa, became a separate political entity under another recent DXAC rule change. No new prefix has been announced, nor is that likely, so look for new activity from this new KH8. Contacts may be harder to find than with Montenegro because the population of Swains Island in the year 2000 was 37.

These additions bring the total of current DXCC countries to 337, meaning that honor roll achievers will now need to confirm 328 countries to qualify for that prestigious award.

Please add Montenegro ("Z7" for now) and Swain's Island (KH8) at the end of the Challenge Worksheet.

August 2006 Challenge Update

More slow and steady progress being made in the 2006 FRRL Bill Erickson HF Challenge. This month finds that two more have reached the Worked All States milestone, congratulations to Maurice, W4CEO and Keith, N9YA for their achievement. Looking at the scores, Dick, AH6EZ has a commanding lead in the QRO class. Herb, W9DTR is leading in both Operator and Rag-chew Classes. You can see the updated results on page 5.

For our new members, the HF Challenge is a club "contest" for club members. Quite simply, work as many states, provinces and DX entities as you can in a calendar year. There are three main classes of entry: QRO where you can run any amount of output power up to the legal limit and any mode or combination of modes. Operator, which is no more than 250 watts output, again any mode or combination, and Limited, where you confine yourself to a specific mode such as QRP (no more than 5 watts), CW only or digital, SSTV, etc. Operating mobile is not considered a mode. ALL contacts must be made on HF frequencies: 10-160 meters. Six meters and up do not count. Ragchew is a sub-class (you must be in one of the three main classes to participate in ragchew) each contact must last a minimum of 10 minutes. Again you can work each state, province and DX entity only once for credit. It's not too late to get involved, if you would like to participate contact the Challenge Administrator, Joe, NA9A for a score sheet. The 2006 contest ends December 31st and winners will be announced and awards presented at the FRRL Banquet in January.

Bill Erickson HF Challenge – July, 2006 Standings

Here are the current standings for the 2006 HF Challenge. If you did not submit a score sheet your score has not been updated. Remember to email your 2006 updates to challenge@frrl.org by the 15th of each month.

Ragchew Class	States/Provinces	DX Countries	Total
W9DTR	-	-	60
N9CHA	-	-	19
K9FBI	-	-	17
К9ІН	-	-	16
К9СОЕ	-	-	16
AL9A	-	-	13
AH6EZ	-	-	13
NA9A	-	-	2

Operator Class	States/ Provinces	DX Countries	Total
W9DTR	48/10	110	168
К9ЈЕ	42/1	112	155
N9YA	50/11	80	141
K9FBI	50/3	72	125
KB9YSI	45/5	48	98
N9CHA	44/7	41	92
W9YBH	20/1	18	39
К9ІН	11/4	3	18

Limited Class	ed Class States/ Provinces DX Countries		Total
K9ARZ (PSK)	46/8	94	148
K9COE (RTTY)	50/8	64	122

QRO Class	States/ Provinces	DX Countries	Total
AH6EZ	50/10	162	222
AL9A	50/12	100	162
W4CEO	50/8	91	149
NA9A	20/4	90	114
J68MS	38/5	34	77

Ham Radio in the School Room

(Continued from page 1)

During the final exercise of the spring semester, we decided to have the kids build crystal radios. Many different versions were built, and all of them worked. John invited Oswego Superintendent of Schools, Dr. David Behlow to attend our club meeting to get an understanding of what we were communicating to the kids. It turned out Dr. Behlow had himself constructed a crystal radio as a boy and eagerly jumped into the project. His enthusiasm was contagious as the radio club kids finished up their radios and tested them out on a long wire antenna John and I had hung in a nearby tree.

The news about the Boulder Hill Ham Club (W9BHB) spread throughout the school district and the local news media. The June 15th issue of the Ledger-Sentinel carried a multiple column, multiple page feature of an interview John and I and two club members participated in. Also, a school district-wide (Local Patron) mailing featured the kids who participated throughout the previous school year. The elementary school web site currently features the ham club as well. (<u>http://www.oswego308.org/schools/boulderhill/</u>)

The Boulder Hill club also was recognized during a recent school district meeting where local residents were treated to a presentation John made to Dr. Behlow. The unsuspecting school superintendent was given the crystal radio he and the club members had built and tested.

Some weeks later, a personal letter from Dr. Behlow arrived in John's mailbox. I was lucky to be there when he opened and read the letter. Both of us were once again overwhelmed! Dr. Behlow had commented that the presentation of the crystal radio set was the most memorable item he has ever received during his professional career.

So what about the ARISS contact? Well, you'll have to stay tuned! Until then, look for W9BHB on the bands and say hi to the kids.

Kayla Bentley Memorial Fund

Thanks to all who donated to the memorial fund set up for Kayla, the grand daughter of fellow FRRL member Mike Bentley, K9FBI. Her mom, Mike's daughter, Becky, was tragically killed in a single car accident during a rain storm in June. Through our collection at the Hamfest and Club Meeting we raised \$188.00

If you missed these events and would like to make a donation, you may send it directly or go in person to:

Kayla Bentley Memorial Fund c/o Earthmover Credit Union 2195 Baseline Road Oswego, IL 60543

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 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.)

license examination ses-

sions, an annual ham-

fest, and participate in

various public service events. If you have a

specialized amateur ra-

dio interest, chances are

you can share it with one

or more of our club

The Fox River Radio

League meets on the

2nd Tuesday of every

month at the Prisco

meeting begins at 7:30

After

Illinois.

coffee

Center in

conducting

The

and

members.

Community

Aurora,

business,

PM.

The next exam session is scheduled for September 19, 2006, at the Prisco Center.

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

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!



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. You can also help support the FRRL Repeaters by joining as a combined Club/ Repeater member for an additional \$10.00.

Check with the Treasurer for details and additional dues rates.

Fox River Radio League Founded 1924

Mailing Address: Box 673 Batavia, Illinois 60510-0673

> Email: info@frrl.org

Web Site: http://www.frrl.org

President Dick Illman, AH6EZ

Vice President Greg Braun, N9CHA

Secretary John Spasojevich, K9COE

Treasurer Larry Shaw, W9OKI

Directors: Dick Anderson, W9YBH

Denny Barfuss, W9HI

Mike Bentley, K9FBI

Charles Penninger, KC9DAO

Past President Bill Schaben, W9AX

License Trustees: Kermit Carlson, W9XA Bob Dillon, WB9LTN

Newsletter Editor Bill Muhr, KB9YSI arcover@frrl.org

Webmaster Tom Davis, WB9CHY webmaster@frrl.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.frrl.org Send Address Corrections to: Fox River Radio League, Inc. 40W981 Bridle Creek Drive St Charles, , Illinois 60175

FRRL Event Calendar

August, 2006

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

September, 2006

FRRL Board Meeting1
BARS Hamfest6
FRRL Meeting8
VE Testing 19

October, 2006

FRRL Board Meeting1	
FRRL Meeting8	
IL QSO Party 22	

ArcOver FRRL Newsletter Copyright 2006, FRRL

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@frrl.org or via U.S. Mail. Contact the Editor for details and submission guidelines.

Prior permission is required to republish original ArcOver material.

The opinions expressed in the ArcOver are strictly those of the authors and do not necessarily represent those of the FRRL, Inc. or its sponsors.

Handy Web Links

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

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. (Kane Co. SKYWARN) -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— 7:00 pm on the 2nd and 4th Wednesdays of each month. On the FRRL 2 Meter repeater.
- KC OEM Amateur Net— Wed. Eves, 7:00 pm on the KC9OEM repeater.

D :Technician Trivia Answer: **D**