



Arc Over

August, 2011

Fox River Radio
League
PO Box 673
Batavia, IL
60510-0673

President's Traffic

By John Spasojevich AG9D

July 21, 2011 4:30AM my alarm goes off in time to watch the final landing of the final shuttle mission forty-two years and a day after the Eagle landed on the surface of the moon. Why did I bother to get up at 4:30 a.m.? On September 12, 1962 JFK asked: "Why does Rice play Texas?" What we know today as "The Rice Speech" contains the familiar lines "We choose to go to the moon...." BUT one of the most important parts of that speech, I believe, has been lost. It follows right after that more famous line: "...because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one we are willing to accept, one we are unwilling to postpone, and one which we intend to win..." On December 12, 1961 just 4 years after Sputnik, and a year before JFK's speech, OSCAR 1, the world's first amateur radio satellite, was launched after literally being built by a handful of guys in a California garage. This year will mark the 50th anniversary of amateur radio in space. Going back to that phrase from JFK's speech you find the keys to our success: GOAL & CHALLENGE. America is at its best when we have a common goal, when we make the commitment to the challenge. America, alas, also has a short attention span. In JFK's time the goal was Apollo and the Moon. By the time we were on our third moon mission, it was hardly covered by the media. Been there done that.

Today for most of you the answer to JFK's question is not apparent, what's the point. It costs too much money and a million other excuses. Project Oscar evolved into AMSAT which has built and launched many "hamsats" over the years. Those of you who have been around long enough know AMSAT's goal was to place satellites in high earth orbit and even geosynchronous orbit. That was the goal. AO-40 was the first of these launched in the year 2000 after many, many years of fundraising (\$4.5 Million worth) and construction. She, like the shuttle was the most complex amateur radio satellite ever created. Once in orbit, there was a failure and the satellite was lost. The ham community was stunned and aggravated, apparently forgetting that launching satellites and operating them in orbit is not an exact science. Thankfully both NASA and AMSAT have pressed on through good times and bad. Manned spaceflight's future is undetermined. AMSAT's future lies in Project FOX, a cubesat, which among other things will feature an SDR transponder. Cubesats are inexpensive as satellites go and there is a good knowledge base in several universities with similar programs. So while the goal has changed, the challenge has always been there. STEM is today's goal. Science, Technology, Engineering and Math. These four things are vital to the future of this country. They are the key to the future of the students in Universities today and key to the future of the next generation.

We in the amateur radio community through ARRL and AMSAT are uniquely capable of promoting STEM through the very nature of our hobby, and in fact have been on that course for some time, but there is more to do. JFK in his speech that hot, late summer day said: "Those who came before us made certain that this country rode the first waves of the industrial revolution, the first waves of modern invention, and the first wave of nuclear power, and this generation does not intend to founder in the backwash of the coming age of space." In our history of amateur radio we have been on those first waves of innovation, the first waves of invention and, yes amateur radio was there in the early moments of the age of space. The science, technology, engineering and math, the STEM of space provides goals and challenges like no other.

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**Minutes of the Regular Meeting of the General Membership of the
Fox River Radio League (FRRRL) an Illinois not-for-profit Corporation
Held at St. Rita of Cascia, Aurora, IL**

Meeting Minutes July 12, 2011

The meeting was called to order at 7:45 PM by John Spasojevich AG9D– President.

- **Secretary's Report:** John AG9D announced that the meeting minutes for the June 14, 2011 Regular Meeting were published in ArcOver. Mike K9FE motioned to accept the minutes, which was seconded by Jeff N9JZN. The motion carried.
- **Announcements:**
Bill NF9D reported that a Kane County ARES meeting was held at Johnson's Mound on Field Day. For more information about the group see visit www.kanecountyares.org

Kent W9NDW reported that the DuPage ARES organization supported the Fox Valley Bicycle & Ski Club Annual Swedish Days Ride held on June 26. There are two upcoming events involving the group: the annual simulated emergency test in September and the Chicago Marathon on October 9. This will be the first year that the DuPage County ARES will provide public service communications support for the marathon. Visit <http://www.dupageares.org>

Chris KC9BKS reminded that information about the Kendall County ARES organization can be found at www.kc-ares.org

Eric K9LGE announced that the Chicago Marathon needs voice operators for 28 aid stations.

- **Committee Reports**
 - o **Cougars Night** – John AG9D announced that almost all of the tickets for this event had been sold, and Ken N9WCX had four tickets remaining for this event at the July 15th Cougars baseball game.
 - o **Education** – Eric AB9OS reported that a new Technician class license instruction program is tentatively scheduled to commence near the end of August. This program will extend over five consecutive Saturdays.
 - o **Field Day** – Mike K9FE and Harry K9DXA announced the club results for Field Day held June 25-26:

QSOs	Band Captain*
10m Phone: 244	James KC9RVP
15/75m Phone: 189	Eric K9LGE
20m Phone: 225	Dick AH6EZ
40m Phone: 346	Dawn KC9LQS
GOTA: 42	Ron KC9SNI
15/80m CW: 599	Warren K9IH
20m CW: 245	Larry W9OKI
40m CW: 237	Jeff N9JZN
VHF (6m) Phone: 148	Bill WB9LPW
VHF (6m) CW: 17	
Satellite: 1	John AG9D
Total Club Score: 8220	

*Please note that these results were obtained through the efforts of the Band Captains and many other hard-working, member-operators. A slideshow of Field Day photos is available for viewing on the club website.

Mike and Harry also thanked John AG9D for his great job providing food and beverages for the Field Day crew.

An FRRRL name badge was presented to Orv Erickson in recognition and thanks for his support of the club Field Day operations by facilitating the availability of generators.

- o **Hamfest** – Dean KC9EOQ reported that Jere KA0KPO had a medical issue which interrupted his participation as this year's Hamfest Chair. Dean, who filled-in for Jere, stated that six club members assisted with the Hamfest setup on Saturday evening and seventeen members assisted on Hamfest day, Sunday, June 10. He further reported that, in addition to advance sales, 227 gate tickets were sold. The financial results were positive, but not yet final. Harry K9DXA expressed thanks to Dean for filling in for Jere.

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John AG9D informed members that the position of Chair for the 2012 Hamfest is open. Members were asked to see John if interested in applying for this position.

- o **Membership** – Chris KC9BKS reported that the FRRL presently has 167 members.
- o **Nets:** Dawn KC9LQS reported that she has sufficient NCS operators at the present time with a few open dates later in the year.
- o **Program** – Dick AH6EZ stated that the program for this meeting would cover QRP rigs and QRP operating procedures. He has no specific program planned yet for the August meeting but welcomes suggestions.
- o **Radio in the Park** – John AG9D announced that the second Radio in the Park event will be held Saturday, August 13 at the Campton Hills Forest Preserve. Bill NF9D will have stations set up at 9 AM and there will be food available. The site is west of St. Charles and directions will be posted on the club website. In response to a question from Harry K9DXA, Bill said that attendees are welcome to bring their own rigs.
- o **Repeaters** – Dick AH6EZ stated that both repeaters are functioning normally; however, the UHF repeater is reported to have a defective coax ground.
- o **VE Team** – Doug W9RD reported that the next VE exam session will be held on the third Tuesday in September (September 20).

Adjournment

With no further business, a motion to adjourn was made by Eric K9LGE and seconded by Bill W9WRS. The motion carried and the meeting adjourned at 8:22 PM.

Respectfully Submitted:
Ron Jahr KC9SNI
FRRL Secretary

New Members

Welcome to the following new members:

CALL	NAME
KA7YHA	Eric Baloun
WB9FEA	Robert Ailor, Jr.
WD9JIJ	Robert Pinkerton
KC9RSV	Jose Concepcion
W8ACI	John Daly

So why did I get up at 4:30? Because Rice plays Texas. Because the overwhelming complexity of such a program demands attention, because the thrill and excitement of watching space exploration or participating in space experimentation via our hamsats is too good to pass up. Now is the time to move forward, too many have paved the way for our generation to allow the backwash to overtake us.

Bill Erickson HF Challenge Update – Mid-July 2011

By Eric Needles AB9OS

Several updates this month as people are slowly adding to their scores. However it looks like the recent storms caused some damage to HF stations and that doesn't help anyone. Dick AH6EZ reports that his Spiderbeam is still down and he has been out of town for motorcycling vacation fun. Good thing he built his score up early in the year!

Larry K9ARZ comments "Canada Day celebration yielded two new ones (NWT and Manitoba), but since then the bands have been broken. Last two new DXCC entities were PY0FO (Fernando de Noronha) and JX50 (Jan Mayen Land)."

Speaking of new DXCC entries, Joe NA9A has the South Sudan update. On July 14, 2011, the UN General Assembly admitted the newly formed country of South Sudan as a member. The ARRL then announced that this action qualifies South Sudan as a new DXCC country. For FRRRL members participating in The Bill Erickson FRRRL HF Challenge, please insert South Sudan below ZS8 Prince Edward & Marion Is. at the bottom of the list on page 4 of the worksheet. Contacts count starting July 14, 2011.

Finally, Ron KC9SNI adds "I'm getting a slow start at this, but I'm hoping that my new-to-me (used) Kenwood TS-570 transceiver and soon to be improved antenna will help me ramp up." That's the spirit Ron!

Remember, it's never too late to get into the HF Challenge, just pick a category and e-mail your totals to challenge@frrl.org. Now for the scores...

Limited Class	States	Provinces	DX Countries	Total
K9MMS-CW	50	10	177	237
K9BQL-CW	34	5	99	138
NF9D-QRP	39	4	46	89
W9IV-QRP	28	5	54	87
N5EP-CW	43	8	36	87
KC9SNI-10m	6		16	22
K9LGE-Digital	9		2	11
AB9OS-CW	2			2

QRO Class	States	Provinces	DX Countries	Total
K9ARZ	50	12	233	295
AH6EZ	50	11	231	292
KC9DAO	47	7	91	145
N4LZ	30	1	101	132
N9JZN	26	5	76	107
NA9A	22	0	69	91
KC9EOQ	29	4	47	80

Operator Class	States	Provinces	DX Countries	Total
K9JE	39	9	143	191
W9DTR	50	11	129	190
K9TCD	42	5	68	115
KC9LQS	30	8	76	114
K9FBI	35	6	54	95
K9IH	27	3	40	70
WB9CHY	32	3	4	39

Ragchewer Class	States/Prov.	DX Countries	Total
N5EP	36/2	4	42
AH6EZ	23/2	9	34
W9DTR	23/3	4	30
K9IH	20	7	27
K9LGE			9
NA9A	7	1	8
AB9OS	2		2

August Program Notes

The August program will be a video and annotated slide show describing how W3AO did Field Day this year and broke the all time QSO count using 25 simultaneous stations.

QRP with the MFJ259 Antenna Analyzer

By Dick Illman AH6EZ

During the July FRRL meeting while I was demonstrating various QRP rigs, I asked the audience what power output they expected from the MFJ259 antenna analyzer. After several wild guesses, I showed that it was putting out 2 milliwatts. I vowed to the audience that I would make a QSO using just the MFJ before the next meeting. I did some calculations and figured that being 47dB below 100 watts, I would need to pick my opportunities. The -47dB is the difference between 20dB over S9 to S2. I figured that I needed maximum antenna gain on each end of the path. For me the maximum gain is my Spiderbeam, however it is still only 10 feet off the ground. The nearest high gain antenna I knew of was Kermit's Steppir up 140 feet.

I decided to try to check into the Monday night 1010 net. First, I did some experimentation. I found that thermal stability was achieved after about 6 hours. Mechanical stability was another whole problem that was ultimately solved by placing the MFJ on a completely different table from my key. I decided that I would be keying the RF output and so I placed a normally open microswitch in a small metal enclosure with RF connectors. I placed the RF switch in series with the MFJ and a coax switch. I was using the Flex 1500 so that I had enough selectivity to partially tune out my own backwave (-40dB) signal. The antenna load (versus no load on the empty coax switch) pulled the MFJ off frequency which meant it was hard to set the frequency prior to being on the air. Not that a best case S2 signal is going to cause too much QRM. After working the Bumble Bee QRP contest this last weekend using the Elecraft KX1 with a random length end fed wire, with a robust 5 watts, I was further driven to see what 2mw would do.

Kermit gave me a 319 signal report and I figure the QSO was 4585 miles per watt. As a comparison, that is about the mileage from here to Italy. The next time you are sweeping your MFJ analyzer across your favorite band, while connected to your efficient HF antenna, think about the QRM you could be causing. Thanks to Kermit for putting up with my very weak signal.

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 and includes social time,

a business portion and a program of interest.

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

We hope to see you there!

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

John Spasojevich, AG9D

Vice President

Harry Jones, K9DXA

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Ron Jahr, KC9SNI

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License Trustees:

Kermit Carlson, W9XA
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Newsletter Editor

Tobi Davis, K9TCD
newsletter@frrl.org

Webmaster

Greg Braun, N9CHA
webmaster@frrl.org

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 St. Rita of Cascia Church in Aurora 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 September 20 at St. Rita of Cascia church. Please see the frrl.org website for details.

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



FRRL CLUB MEETINGS ARE HELD AT ST. RITA OF CASCIA IN AURORA, IL, BUT LOCATION IS SUBJECT TO CHANGE. PLEASE CHECK THE FRRL WEB SITE FOR THE ADDRESS AND A MAP TO THE MEETING LOCATION.

<http://www.frrl.org>

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

FRRL Event Calendar

August, 2011

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FRRL Meeting	9

September, 2011

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VE Session	20

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 arccover@frrl.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.