



ARC OVER



The Official Newsletter of the Fox River Radio League, Est. 1924
Our 95th Year in Amateur Radio!

Who We Are

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Education Chair:
Vacant

Newsletter Editor:
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Chris Kennell KC9BKS



About Us

The Fox River Radio League, Inc. is a general interest Amateur Radio club serving the central Fox River Valley area in Illinois. Club records indicate the club has been in existence since at least 1924, and it 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 Federal IRS Statutes.

We sponsor training classes for those seeking a new or upgraded Amateur Radio license, license examination sessions, and participation in various local Public Service events. Our membership covers a broad variety of interests - if you have a specialized amateur radio interest, you will likely find camaraderie with one or more of our club members.

We meet on the 2nd Tuesday of every month at Bethany Lutheran Church, located at 8 S. Lincoln St. in Batavia, Ill. The meeting begins at 7:30 PM and includes a short business portion, social time and a program presentation of interest.

Meetings are open to the public. Anyone interested in the amateur radio hobby are invited to attend. Family members are welcome.

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The FRRL ArcOver Newsletter is published monthly by the Fox River Radio League, Inc. Submission deadline for all news articles, items, and information is the 3rd Tuesday of each month for inclusion by the next publishing date. Please submit any such requests to newsletter@frrl.org.

2019 Membership Dues

Regular Dues: \$30 | Family Dues: \$40 | Sr. Citizen / Active Military / Student (full time under 22): \$25
Repeater Support: \$10 donation

FRRL Dues and Repeater Support 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. Copyright © 2019, FRRL. Prior written permission is required to republish material present in the ArcOver.

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President's Traffic

From the President's Desk

I have been talking about change in my last few messages and I find no reason to stop now. So this month's question is: how do you expand your Amateur Radio horizons? I have a one-hour plus commute each day. I find that the best use of that time is to listen to podcasts. Here are some of my Ham Radio favorites:

- ARRL Audio News and Amateur Radio Newline are my go-to for current events. These weekly news casts are fairly short and to the point.
- Ham Nation is an audio or video podcast. If you like live shows you can watch Ham Nation live on Wednesday evenings at 8:00PM. They also have after show nets on 20 or 40 meters as well as DMR or Echolink.
- ARRL's The Doctor Is In is great for the technical side of Ham Radio. This weekly 15 to 20 minute podcast answers your technical questions including topics such as grounding, antennas, and SWR.
- HAM Radio Workbench focuses on DIY projects. This 2 to 3 hour biweekly podcast takes a deep dive into the night's project. It is always interesting and full of how-to's. I had fun building their Antenna Analyzer and it did not cost an arm and a leg.
- QSO Today is an interview show that talks with the top names in Ham Radio today. If you want to hear from top names in the hobby and find out what makes them tick, this podcast is for you.



I want to thank those that participate in the 50/50 raffle each month. You are helping the club. At the October Membership meeting I intend to bring a Heathkit SB-303 receiver. I cannot attest to its ability to operate but it looks good. I am also bringing a power supply/speaker that was once mated to an SB-104. Again, I am not sure of its condition. All will be sold as is with proceeds provided to the club.

73, Dan W9STS

Test Your Knowledge!

Each month the ArcOver will post 3 Exam Test Pool Questions to challenge you - one from each of the Technician, General, and Extra Class License Exams. Answers will be hidden throughout the ArcOver.

Technician - T4B10

Which of the following is an appropriate receive filter bandwidth for minimizing noise and interference for CW reception?

- A. 500 Hz
- B. 1000 Hz
- C. 2400 Hz
- D. 5000 Hz

General - G3C05

Why is long-distance communication on the 40-meter, 60-meter, 80-meter, and 160-meter bands more difficult during the day?

- A. The F layer absorbs signals at these frequencies during daylight hours
- B. The F layer is unstable during daylight hours
- C. The D layer absorbs signals at these frequencies during daylight hours
- D. The E layer is unstable during daylight hours

Extra - E9D12

Which of the following would provide the best RF ground for your station?

- A. A 50 ohm resistor connected to ground
- B. An electrically short connection to a metal water pipe
- C. An electrically short connection to 3 or 4 interconnected ground rods driven into the Earth
- D. An electrically short connection to 3 or 4 interconnected ground rods via a series RF choke



Member Traffic

A place for you, our FRRL members, to come share your thoughts, voice your opinions, and talk about any topics that may be of general interest to the FRRL club or Amateur Radio in general.

Hello All,

Reposted from Groups.io - HRO Superfest is September 27th & 28th 2019. Hours are 12pm-5pm on Friday and 9am-4pm on Saturday. There will be a number of different forums and vendors onsite.

73, John W9JDM

Hi All,

As you may notice, this month's Member Traffic section is a bit light. I often pull neat projects or finds from Groups.io for this section, and your fellow club members would love to see what you're working on! If you have something you think other members might find interesting, please post on Groups.io and you may be featured in a future ArcOver.

A few months back, I built a shortened 20M dipole based on some plans I found by KC9RG online. I used slightly different wire (lamp cord) and ran the non-coil part of the wire inside of the PVC. I also used banana terminals in the center so that the whole apparatus pulls apart quickly and into a small package. I use a tripod that's designed for PA speakers, which is quite sturdy. It also has an air brake as you collapse it so that the antenna comes down smoothly.

I brought this portable operating setup with me on my honeymoon earlier this month (at the Mrs.' suggestion!) in the hopes of making some contacts while we were relaxing on Carolina Beach.



Alas, we had to change our plans due to Hurricane Harvey and we ended up in Nashville instead. I attempted to set up anyway in the hotel room, but you would not believe how much noise that window AC unit put out! Of course, it was much too hot to turn the unit off, and the window did not open either. I was receiving anywhere between S5-S8 noise whenever the unit in the room was on. I was faintly able to hear a few hams, but I also think the plaster of the hotel room walls was detuning the anten-

na slightly. The hotel was built of concrete block walls too, so I'm sure that didn't help either. (Our room in North Carolina would have had a balcony.) So, I unfortunately didn't end up making any contacts on HF. I did talk to a couple of hams on the drive down on 146.520 simplex in the car however, so all was not a complete bust.

73, John W9JDM

New Members		
Please welcome our newest members to the club!		
Call	Name	License Class
In Memoriam (Silent Keys)		
Call	Name	Location



Upcoming Events

Come join us at an event - some are on the airwaves, and some are in person.

This format is designed to be easy to print and hang on your fridge.

OCTOBER 2019						
S	M	T	W	T	F	S
		1 B N	2	3	4	5 C
6	7	8 M	9	10	11	12 C
13	14	15 N	16	17	18	19 C
20 E	21	22 N	23	24	25	26 C
27	28	29 N	30	31		

NOVEMBER 2019						
S	M	T	W	T	F	S
					1	2 C
3	4	5 B N	6	7	8	9 C
10	11	12 M	13	14	15	16 C
17	18	19 N T	20	21	22	23 T
24	25	26 N	27	28	29	30

DECEMBER 2019						
S	M	T	W	T	F	S
1	2	3 B N	4	5	6	7
8	9	10 M	11	12	13	14
15	16	17 N	18	19	20	21
22	23	24 N	25	26	27	28
29	30	31 N				

BOct. 1: Board Meeting

- 7:00PM
- Colonial Cafe in Aurora, Ill.

NOct. 1, 15, 22, 29: Regular FRRL Net

- 7:30PM
- W9CEQ 2M Repeater

COct. 5, 12, 19, 26: General Class

- 9am-noon
- Golden Corral in Aurora, Ill.

MOct. 8: Member Meeting

- 7:30PM
- Bethany Lutheran Church in Batavia, Ill.
- Program: Tom N9HSJ ARES

EOct. 20: IL QSO Party

- 9:00AM - Setup
- 12:00PM - Operating
- 5:00PM - Breakdown
- Springbrook Prairie Forest Preserve, Naperville IL
- South Shelter

CNov. 2, 9, 16, 23: General Class

- 9am-noon
- Golden Corral in Aurora, Ill.

BNov. 5: Board Meeting

- 7:00PM
- Colonial Cafe in Aurora

NNov. 5, 19, 26: Regular FRRL Net

- 7:30PM
- W9CEQ 2M Repeater

MNov. 12: Member Meeting

- 7:30PM
- Bethany Lutheran Church in Batavia, Ill.
- Program: Jaye W9CY Building Your First HF Station

TNov. 19: VE Testing

- 7:00PM
- Messenger Library, N. Aurora

TNov. 23: VE Testing

- 9:00AM
- Golden Corral in Aurora, Ill.

BDec. 3: Board Meeting

- 7:00PM
- Colonial Cafe in Aurora, Ill.

NDec. 3, 17, 24, 31: Regular FRRL Net

- 7:30PM
- W9CEQ 2M Repeater

MDec. 10: Member Meeting

- 7:30PM
- Bethany Lutheran Church in Batavia, Ill.
- Program: Holiday Party



Event Information

If you have an idea for an event, or would like to share details on an upcoming event, please reach out to John W9JDM at director2@frrl.org or Priscilla AE9PM at director3@frrl.org.

General Class

The Fox River Radio League (FRRL) is joining together with Northern Illinois Amateur Radio Testing and Training (NIARTT) to present an Amateur Radio Technician Class license training course this fall. NIARTT is a collaboration established by FRRL members to run the regularly-scheduled Technician, General, and Extra license classes in coordination with other area clubs. Currently, this collaboration includes the FRRL as well as the BARS and CSRA area clubs.

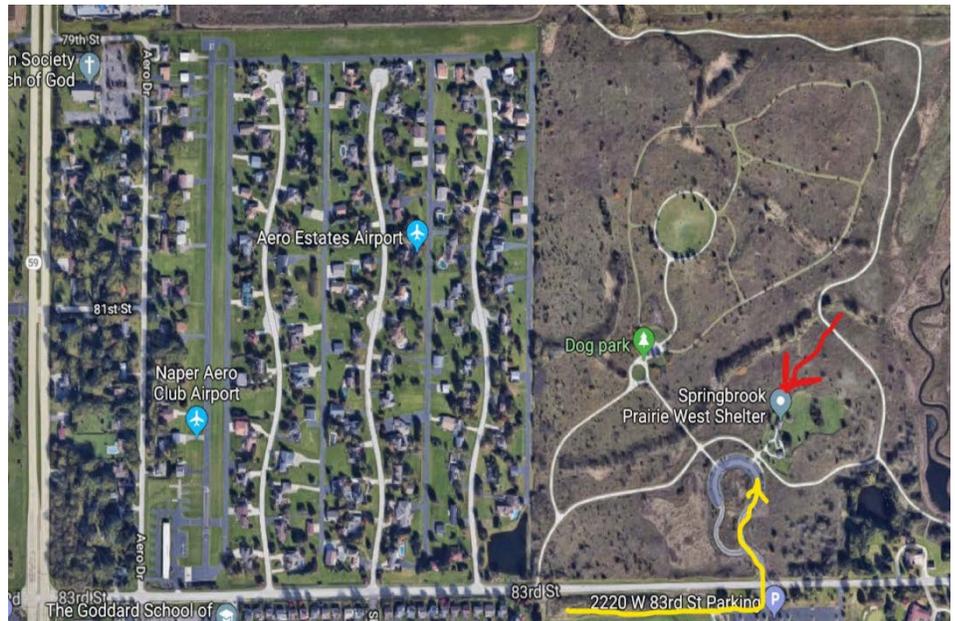
This course is a free 10 week course where you will learn everything you need to receive your new Amateur (Ham) Radio General Class FCC radio license.

This class is designed for people who are new and experienced alike, and are interested in finding out more about the world of the Amateur Radio. There is no prior license required. There is no age limit. There is only the need of interest in the Ham Radio hobby, and a willingness to learn. Be prepared for both interactive, group and individual study. There will be a VE test license exam on the last week of the course. Anyone is invited to join the class or "sit in" as a refresher.

For more information and to sign up, please visit frrl.org/education.

Illinois QSO Party

The Illinois QSO Party is an Annual event sponsored by The Western Illinois Amateur Radio Club



(WIARC). The ILQP takes place each October and involves amateur radio operators in all Illinois counties as well as operators from across the USA and in many foreign countries. The QSO party provides Illinois operators the opportunity to work the 'rare counties'. Illinois stations may operate as Fixed, Portable, Mobile or Rover stations. High and Low power classes are provided for both Illinois Fixed and Non-Illinois stations and QRP competition is also provided. This is a no cost Event.

Setup will start at 9:00am, operating will start at noon, and breakdown will take place at approximately 5:00pm.

Technician - T4B10

Which of the following is an appropriate receive filter bandwidth for minimizing noise and interference for CW reception?

A. 500 Hz

Repeater Information

Club sponsored or club affiliated local repeaters are listed below.

KC9OEM 2M

- 145.470 MHz, -600 KHz offset
- 103.5 Hz tone
- Net: Wed. 6:30PM
- Owned by Kane Co. OEM

W9CEQ 2M

- 147.210 MHz, +600 KHz offset
- 103.5 Hz tone
- Net: Tues. 7:30PM (except second Tues. of month)
- Owned by FRRL

W9CEQ 70CM

- 444.300 MHz, +5 MHz offset
- 114.8 Hz tone
- IRLP #4850, Echolink #230933
- Owned by FRRL

W9CEQ_B D-Star 70CM

- 442.10625 MHz, +5 MHz offset
- Contact W9XA for information

W9CEQ_C D-Star 2M

- 147.225 MHz, +600 KHz offset
- Net: 8:00PM Wed.
- Contact W9XA for information

More repeater information can be found at frrl.org/repeaters.



Meeting Minutes September 10, 2019

Minutes of the Regular Meeting of the General Membership of the Fox River Radio League (FRRL), an Illinois not-for-profit Corporation. Held at Bethany Lutheran Church, Batavia, Ill.

The meeting was called to order at 19:34 CDT by President Dan W9STS. Audience introductions: Name, Call, QTH and "Will you be operating the IL QSO Party"? Approval of August 2019 Member Meeting minutes: Motion was moved, seconded and accepted. There were 40 people present at this meeting.



Reports

Treasurer's Report

Dan WA9YKK

Dan reported the balances as of 09/02/2019.

Repeater

Jim N9XP

Dave W9XU reported that attendance is down on the net. Dan W9STS encourages all to use our repeater.

Tech/Membership/Groups.io

Mike WX9SPL

Kurt W9YNP had nothing to report on website.

ARES

Terry W9AUV

Terry updated the members on the current events from ARES. There's a net every Wednesday.

Classes/Programs/VE

John W9JDM

No report.

Outreach/Newsletter/PR

Priscilla AE9PM

No report.

Repeater

Kermit W9XA

No report.

Volunteer Exams

Paul AC9BS

There was no report, but there will be a VE Session at Panera Bread (154 W Wilson) in Batavia on Tuesday September 17th at 7:00pm.

Old Business

Upcoming Classes

There will be a General Class this fall at the Golden Corral. This class is sponsored by several clubs. FRRL will be planning its own Tech Class in the near future. Volunteers are needed to teach the FRRL class.

New Business

Nominating Committee

Dan introduced the Nominating Committee with Dean KC9EOQ as Chair. Ken Miller KE9NM and Lance Clarke W9QB are additional members making up the Committee. Several Board positions will be open. If you are interested in serving, please notify a Committee Member.

General - G3C05

Why is long-distance communication on the 40-meter, 60-meter, 80-meter, and 160-meter bands more difficult during the day?

C. The D layer absorbs signals at these frequencies during daylight hours





Come join the camaraderie at one of our monthly meetings! The social hour following the business portion is a great opportunity to meet your fellow hams.

IL QSO Party

Denny W9HI presented some slides for the upcoming IL QSO Party. The website will be updated with further details on the event.

Announcements

Gary K9MMS has items from Lou Petkis estate. He is thinking about having a sale. Send him an e-mail if interested.

Dean KC9EOQ mentioned that the

Extra - E9D12

Which of the following would provide the best RF ground for your station?

C. An electrically short connection to 3 or 4 interconnected ground rods driven into the Earth

VE test location needs to be updated on the website.

Marty N9NTM updated the club on upcoming events.

Upcoming Events

- September 13th/14th NIDXA/ W9DXCC Conference
- September 17th VE Session (Panera Bread Batavia)
- October 1st Board Meeting
- October 8th Membership Meeting
- October 20th IL QSO Party

Program

Modeling Your Own Antenna – Dan Harmon WA9YKK

Adjournment

A motion was received, seconded and carried to adjourn the meeting. The member meeting was adjourned at 20:05 CDT.

Respectfully submitted,
David Booher W9BOO
FRRL Secretary





ARRL Renews Request for FCC to Replace Symbol Rate with Bandwidth Limit

In ex parte comments filed on September 17 in WT Docket 16-239, ARRL renewed its request that the FCC delete symbol rate limits below 29.7 MHz for data transmissions in the Amateur Service rules. As it did in its initial filing, ARRL asked the FCC to couple the removal of the symbol rate limits with the adoption of a 2.8 kHz bandwidth limit. In response to ARRL's 2013 ARRL Petition for Rulemaking (RM-11708), the FCC proposed deleting the symbol rate limits but declined to replace them with the 2.8 kHz bandwidth that ARRL wanted.

“This proceeding addresses an update to the Commission’s rules that is needed because a limitation in the rules unintentionally is inhibiting US amateurs from employing the latest improvements to some of the digital modes,” ARRL said in its remarks. “Data signals commonly used for daily communications as well as in disaster situations have bandwidths in the range of 2.5 kHz and must co-exist with other modes that use bandwidths as narrow as 50 Hz.”

ARRL said the 1980s-era symbol rate limits today inhibit the use of some efficient data modes. Repealing the symbol rate limit, ARRL contended, would “allow shortened transmission times for the same amount of data without increasing the bandwidth occupied by the signal. Other Amateurs would



benefit by the resulting reduction in potential interference.”

Amateur Radio Digital Communications Announces Grant to ARISS

Amateur Radio Digital Communications (ARDC) has announced what’s being called “a very generous grant” to Amateur Radio on the International Space Station (ARISS) to help fund its next-generation Interoperable Radio System (IORS) and associated infrastructure improvements and enhancements. ARISS said the IORS will replace the aging amateur stations on the ISS to ensure the continuation of its primary program that lets students speak to ISS crew members via Amateur Radio. ARDC said it believes ARISS helps to engage students with Amateur Radio and science, technology, engineering, and mathematics (STEM) in general “by providing exciting capabilities that don’t exist” on cell phones or the internet. A dollar figure was not made public.

“This was fantastic news!” said ARISS International Chair Frank Bauer, KA3HDO, who expressed appreciation for ARDC’s generosity. Bauer said the ARDC gift would go a long way toward covering the

considerable cost of making the IORS a reality.

ARISS said its next-generation IORS will “enable new, exciting capabilities for hams, students, and the general public.” It also plans additional enhancements, which would include:

- New Amateur Radio communication and experimentation capabilities, including an enhanced voice repeater and updated digital packet radio
- APRS capability
- Two-way slow-scan television (SSTV) in both the US and Russian ISS segments
- HamTV-2
- A new multi-voltage power supply that will support present and future Amateur Radio capabilities and enable wireless experimentation.

Festival of Frequency Measurement Set to Honor WWV Centennial

HamSCI and the Case Amateur Radio Club of Case Western Reserve University (W8EDU) will sponsor a “Festival of Frequency Measurement” on the day of WWV’s centennial, October 1, from 0000 to 2359 UTC (starting on Monday evening, September 30, in the Americas). The event invites radio amateurs, shortwave listeners, and others capable of making high-quality frequency measurements on HF to participate and publish their data to the HamSCI community on the Zenodo open-data sharing site.

