





The Official Newsletter of the Fox River Radio League 101 Years of continuous service to our communities

1924

a brand-of

2025

## Who We Are

President: Kermit Carlson W9XA

Vice President:
Dan Nolan WA9FRY

Secretary:
Art Shuter NN9I

Treasurer:
Dan Harmon WA9YKK

Director :1
Will Sperling W9WSS

Director: 2
Pat Brod K9ANL

Director 3
Paul Mitchell KC9SEB

<u>Director 4</u> John Greusel KC9OJV

Past President: Terry Todd W9AUV

Programs:
Paul Mitchell KC9SEB

Education / VE: Dan Nolan WA9FRY

License Trustee (W9CEQ): Kermit Carlson, W9XA

License Trustee (W9NE): Denny Barfuss W9HI

Newsletter Editor: Jerry Chapman N9JLC

Webmaster:
Mark Van Daele K9MEV

Membership Database: Curt Sauer, W9YNP

Net Coordinator: Curt Sauer, W9YNP

## **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, III. 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.

Join Us On Facebook



Fox River Radio League

Mailing Address: P. O Box 673

Batavia, IL 60510-0673 Email: info@frrl.org

Website: http://www.frrl.org







—— FRRL President ———



As the October Membership meeting approaches, please consider volunteering as an FRRL Club officer. The Nomination Committee appointed at the last Board meeting is looking for FRRL members who would like to serve.

The Committee is comprised of three members of the FRRL who present the names of candidates for club office at the November Membership meeting.

This year's Nomination Committee is comprised of three past Presidents of the FRRL;

Art Shuter NN9I - Chairman
Terry Todd W9AUV
Mike Urso K9FE

Please contact one of them if you are interested or would like to gather more information about serving as a club Officer or Director.

The following is a message from the ARRL about two bills now in Congress House H.R. 1094 and Senate. S. 459. The bills are the result of over twelve year's of efforts by the ARRL to preempt restrictive land covenants that prohibit Amateur Radio antennas. Ten years ago I had the opportunity to lobby on behalf of the League in Washington, DC in the offices of the Senators from Illinois, Indiana and Wisconsin.

Local governmental bodies that control zoning may not prohibit amateur antennas altogether, However with the majority of new housing being built by developers who include restrictive covenants and deed restrictions as part of the development process, the ability of an amateur to erect an antenna is effectively lost in areas of new housing developments.

It appears that we have a very good chance of seeing these Bills pass in this Congress. Please read the letter below - and do sign on to add your voice to this effort. Please remember to go to <a href="https://send-a-lettery.org/hoa/">https://send-a-lettery.org/hoa/</a>

and enter you call and the site will send letters in support of Amateur Radio.

## 73, Kermit W9XA



## **WELCOME NEW MEMBERS!!**

Callsign	Name	License Class	
KE9DQZ	Michael Mayhew	Technician	
KB9SYU	Ted McAleer	Technician	



## From Thom Beebe, W9RY - ARRL IL Section Manager;

Please help us get it passed this time.

#### CHANGE THE LEGAL RIGHTS OF AMERICAN HAMS

The ARRL is focused on reducing legal restraints on the ability of American Amateur Radio Operators to engage in the active practice and enjoyment of Amateur Radio.

One of the most insidious and increasing threats to the survival of Amateur Radio and our ability to serve our communities and Nation, as we are required to do by Federal regulation, is the proliferation of private land use restrictions that prohibit the installation of outdoor antennas and that sometimes actually deny Federally licensed Amateurs from operating any amateur radios, regardless of where their antennas are located — in their attics, hidden in trees, or mounted on their vehicles.

Federal law — since 1996 — has guaranteed to every American — except Amateur Radio Operators — the right to erect antennas outside or on their residences for the purpose of TV reception, satellite TV and internet access, wireless internet access, and even wireless internet redistribution. But Amateur Radio operators are denied the equal right to erect comparable antennas.

Since 2005, Federal law has also guaranteed to every American the right to proudly display the American Flag by installing flagpoles in their yards. But, despite that right to install vertical poles in their yards — American Radio Amateurs are denied the right to use those vertical flagpoles as vertical antennas.

We believe the denial — to licensed Amateur Radio Operators — of the rights guaranteed to all non-Amateur Radio licensed American homeowners — the right to install antennas on the land they own — is without justification and should not be permitted to continue.

To eliminate these private land use restrictions, the ARRL has worked over the past several years with our elected officials to draft Congressional legislation — H.R. 1094 in the U.S. House of Representatives and S. 459 in the U.S. Senate — that, when passed will extend to all Hams the right to operate from their homes and the right to install antennas on the land they own. We have bipartisan support for this legislation.

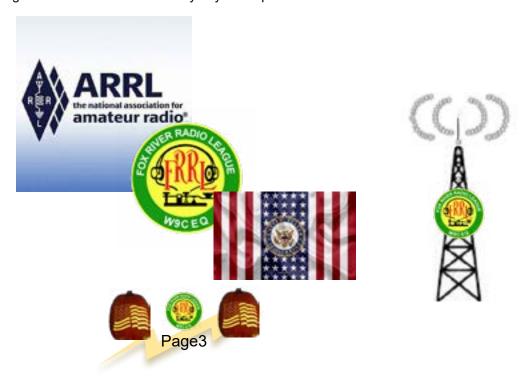
#### BUT, WE NEED YOUR HELP TO PASS THIS LEGISLATION!!!

How can you help? By sending a letter to your Representative and Senators asking that they co-sponsor and support H.R. 1094 and S. 459.

How can you send these letters? It is easy.

**Go to** — <a href="https://send-a-lettery.org/hoa/">https://send-a-lettery.org/hoa/</a> — enter your call sign and click on "Send My Letters" and your letters will be delivered to our Washington legislative team for hand delivery to your Representative and Senators.

#### 73, Kermit W9XA







## FOX RIVER RADIO LEAGUE MEMBERSHIP MEETING MINUTES September 9, 2025

Minutes of the Regular Meeting of the <u>General Membership</u> of the Fox River Radio League (FRRL) an Illinois not-for-profit Corporation

The September 9, 2025 Membership Meeting was held at the Bethany Lutheran Church Batavia, IL. There were 42 members attending in person and 7 on Zoom.

**Board Members and Directors Present** 

President- Kermit Carlson W9XA

Vice President-Dan Nolan WA9FRY

Treasurer, Dan Harmon WA9YKK

Secretary, Art Shuter NN9I

Director, Will Sperling W9WSS

Director, Paul Mitchell KC9SEB

Director, John Greusel KC9OJV

Director, Pat Brod K9ANL

Past president, Terry W9AUV

The meeting was called to order by Kermit W9XA at 7:30 pm CST at Bethany Lutheran Church, Batavia, IL.

Pledge of Allegiance

Approve August Meeting Minutes: Motion moved by Dean KC9EOQ with 2nd by Ken N9WCX. Motion passed.

Treasurers Report Dan WA9YKK: Dan reported the bank account balances As of September 1, 2025.

**Education**: Dan WA9FRY – Tech class will start Wed 9/24 on Zoom. An instructor is needed for 11/19 for chapter 6 "How to Talk to other Hams". (Contact Dan WA9FRY @ gmail.com).

The Extra Class starts on 9/20.(An instructor is needed for Chapter #3 "Rules and Regulations". This class will meet at Messinger Library in North Aurora.

Club Activities: Paul KC9SEB – Tonight's program will be LOG: "Loop on Ground" by Pat K9ANL. Next month will be Harry K9DXA talking about operating the Illinois QSO party from three corners.

VE update – Denny W9HI – The next VE session will be September 18 th. We are in need of Volunteer Examiners.

Illinois QSO Party – Denny W9HI (October 19) The location for the QSO Party will be at Springbrook Prairie in Naperville.

Membership/Database - Curt W9YNP: We now have 183 members.

**Technical Committee** – John K9OJV/ Mark K9MEV- John showed a 10 watt amplifier for low power radios which he built. If you are interested, he will help you find parts and help build it.

Repeaters – Kermit W9XA – All repeaters are working well.



Field Day Committee – Patrick K9ANL, Greg WB0OET – The decision has been made to do Field Day 2026 at Mooseheart.

Old Business: Club Storage Area - Our club equipment was moved to a new

storage location with a THANK YOU to: Dan WA9YKK, Patrick K9ANL, Gentry KE9CZW, Dan KE9CWM, John KC9OJV, Jeff N9GAZ, Todd KD9UEA and Robert WB9RMG.

Dan W9TVE and son Benjamin KD9WUW participated in STEM for Cub Scouts at the VFW in Naperville.

Scouting - JOTA, Camp Big Timber, Mentor - Dan WA9FRY

## **Upcoming Events:**

W9DXCC Naperville - September 12th-13th

VE Testing – Geneva – September 18th

Newsletter deadline - August 20

Peoria Hamfest - September 20th

**BOD** meeting October 7th

Membership Meeting - October 14th

Illinois QSO Party - October 19th

Motion to adjourn: Motion moved by Ken N9WCX, 2 nd Terry W9AUV.

Meeting adjourned at 8:28

Respectfully submitted,

Art Shuter - FRRL Secretary













SUNDAY	MONDAY	TUESDAY	WEDNESDAY 1 Technician License Class 1930 FRRL220 Net 223.86 - 110.9	THURSDAY 2	FRIDAY 3	SATURDAY 4
5 1900 ALL OPR NET	CW NET 28.150 2000  SSB NET 28.720 2030	7 1900 FRRL BOD MTG 1930 FRRL 2M NET	8 Technician License Class 1930 FRRL220 Net 223.86 - 110.9	9	10	11
1900 ALL OPR NET	CW NET 28.150 2000 SSB NET 28.720 2030	14 1930 FRRL MBR MTG NO NET	15 Technician License Class 1930 FRRL220 Net 223.86 - 110.9	16	17	18
19 1900 ALL OPR NET ILLINOIS QSO PARTY	20 CW NET 28.150 2000 SSB NET 28.720 2030	21 1930 FRRL 2M NET	Technician License Class 1930 FRRL220 Net 223.86 - 110.9	23	24	25
26 1900 ALL OPR NET NEWSLETTER DEADLINE	27 CW NET 28.150 2000 © SSB NET 28.720 2030	28 1930 FRRL 2M NET	29 Technician License Class 1930 FRRL220 Net 223.86 - 110.9	30	ABILE WEET	
	CW NET 28.150 2000  SSB NET 28.720 2030					
WCRA 2M NET 8PM 145.31 -6 107.2	VARA 2M NET 8PM 146.79 -6 107.2	FRRL 2M NET 7:30 147.21 +6 103.5	ARES 2M NET 6:30 145.47 -6 103.5	DUPAGE ARES 70CM NET 7:30 444.875 +5 114.8		MEETING HERAN CHURCH .N ST. BATAVIA IL



October 2025 Fox River Radio League Nacko





## **NEWS AND INFORMATION CENTER**

Local - National - International

## **Cub Scout Event Recap: Three Fires Council STEM Spectacular**



We're thrilled to share highlights from the Three Fires Council Cub Scout STEM Spectacular, held on Saturday, August 23, at the VFW Post 3873, 908 West Jackson Avenue, Naperville, Illinois.

This year's event saw a noticeable uptick in attendance, with a greater number of participants in 2025 than we had in 2024, making for an even livelier day of fun and learning.



Two FRRL representatives staffed the event, connecting with kids and their families. We handed out trifold club flyers to parents, sharing details about our organization, and gave FRRL souvenirs to the young participants.

The kids enjoyed choosing from up to four different amateur radio activities, sparking their curiosity about radio communications.

A special moment came when Congressman Bill Foster attended and took part in a Doppler shift

demonstration, making the day even more memorable.

If you're interested in staffing future FRRL events, please reach out to Dan Nolan, WA9FRY, <a href="mailto:education@frrl.org">education@frrl.org</a>



## Dan and Denny,

Thank you SO MUCH for participating in the STEM Spectacular last Saturday! We received rave reviews from both the kids and the parents and I even had kids tell me that the Radio display was their favorite of the entire show! You guys beat out snakes, Ooblek, Build a Blinkie, woodturning among others. You accomplished planting those seeds in the kids' minds to help them.think about STEM as a career.

Please thank the Zielinskis for their efforts - the display was fun, interactive and it nailed the objective in presenting to kids of this age.

Now it's on to Forge On and fun with the middle-high school kids!

Sincerely,

Steve Purduski



## FRRL Scouts on the Air Event Sept 8, 2025

## Kirk K9MSG

Troop leaders asked us to share with you their appreciation for a "great radio experience for our Scouts!" Thank you to all the FRRL operators who took time to speak with the Scouts on VHF, UHF, and 40m last night! Every Scout made contacts on each of the three stations! QSO's occurred across Northern IL and the Midwest and spanned to TX & NY on HF as well as states out West via Echolink. Leaders made contacts too! They also kept busy with a beacon hunt and a CW decoding exercise. We especially enjoyed having no wind, no rain, and no heat... what a beautiful night. Special thanks to our volunteers for lending their time and equipment including Jim (N9XP), Adrian (KB9QQL), Pat (KB9ANL) & Scott (KE9AJK). We think we spotted a few future licensed radio operators within this group of Scouts. Please enjoy this initial group of photos from the evening.





### Hello All -

I am at Green Valley (Grid EN51xr) for the 10GHz and up contest. So far best DX is 356 km, and have 11 stations in the log Manistee MI, Ludington, MI and Ossian, Indiana (Ft Wayne).

Running an 18" dish ,transverter and amplifier with 5watts output on 10,368.1 MHz.

About an hour and a half later I was able to work Pete K9PW who was working the contest this weekend at various lakefront spots between Algoma and Sheboygan. When he and Zack W9SZ and Larry WA9TT reached Two Rivers just North of Manitowoc, I was able to work all three portable stations on 10 GHz.

Thanks for the contacts Pete!

73, Kermit W9XA



## Team USA Earns Medals at ARDF World Championships in Lithuania

09/05/2025

By Charles E. Scharlau, NZØI, USA ARDF Co-coordinator

Team USA brought home both individual and team medals from the 22nd World Championships of Amateur Radio Direction Finding (ARDF), held August 16 – 22, 2025, in Birštonas, Lithuania.

ARDF, also known as radio orienteering, combines radio direction-finding with on-foot map-and-compass navigation. Using a handheld receiver with a directional antenna, a map, and a compass, competitors search for "foxes" (transmitters) in forest terrain, racing to locate them in the shortest time.

The USA delegation numbered 19 competitors, who represented the country across multiple age categories. Overall, the championships featured over 300 athletes from 25 nations, a strong showing on the international ARDF stage.

The highlight for Team USA came in the classic 80-meter event, in which Nadia Scharlau, KO4ADV, of North Carolina,



was awarded an individual silver medal in the W55 (women ages 55–64) category. Her strong performance also anchored the USA W55 team, which earned the team bronze medal. The W55 team was rounded out by Maria Burrus and Alla Mezhevaya, who also received team medals. At the world championships, team scoring is based on the two best individual results from a nation's competitors in each age category; teams may include two to three athletes.

Several U.S. athletes competed at a world championship for the first time, including Maria Burrus (W45); Rose Ganim, W1RBG (W45); Andrew Meyer (M21); Matt Craig, KM8WBC (M50), and Roland Woodward, KC9YQT (M50). Except for Burrus and Craig, each was introduced to the sport at the 2024 USA

Championships in Michigan — demonstrating rapid progression from novices to international competitors in under a year.

Other notable U.S. competitors included Erin Hammer (W35); Natalia Leoni (W45); Ruth Bromer, WB4QZG (W65); Gheorghe Fala (M21); Eduard Nasybulin (M40); Alexander Myachin (M50); Evgeny Danilov, KQ4QYZ (M60); William Wright, WB6CMD (M60); Nicolai Mejevoi (M60); Ian Shields (M70), and Joseph Huberman, K5JGH (M70).



## ARRL Lab Helps Radio Amateurs Avoid Interfering With US Space Force Radar

09/05/2025



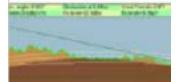
US Space Command headquarters is being moved to Huntsville, Alabama, known as "Rocket City USA." The move was announced in a press conference on September 2, 2025. Huntsville will host the 2026 ARRL National Convention as part of the Huntsville Hamfest, but there's a bigger connection between US Space Command and amateur radio.

Space Command utilizes forces such as the US Space Force to accomplish its command mission. The ARRL Lab supports the US Space Force's Phased Array Warning System (PAVE PAWS) early warning radar installations which scan the skies for incoming missiles and space junk.

Since 2007, the ARRL Lab has been conducting this crucial analysis using Longley-Rice terrain modeling to determine if an amateur fixed station, repeater, or EME station is eligible for a waiver to be granted by the military to run more than the 50 watts of RF power on the 70-centimeter band currently allowed with a 100-mile radius of either the Cape Cod Air Force Station in Massachusetts, or Beale Air Force Base in California. "We want to ensure that amateurs can exercise as many operating privileges as possible, while understanding the need for the Space Force to operate without interference," said ARRL Lab Manager George Spatta, W1GKS.

The reports provided to the Space Force advise a "cone of protection" in azimuth and elevation at which the amateur would be limited to a power level which would not interfere with the radar.

Amateurs are secondary users on the 70-centimeter band and the ARRL Lab's cooperation with the military helps ensure we do not interfere with this vital function of our nation's security. As of this writing, the Lab is conducting this analysis for two different waiver requests. "It is an important part of the work we do to serve radio amateurs," said Spatta.





# New ARRL Book Release: Stealth Antennas for Ham Radio 08/22/2025



## Designs for Discreet Amateur Radio Operating!

Stealth Antennas for Ham Radio is full of antennas to get you on the air no matter where you live. Even radio amateurs who live with antenna restrictions or covenant limitations will find solutions in this book. Learn how to install a multiband vertical that looks like a flagpole, or how to run an end-fed random wire along your roof, so the neighbors never notice. If you are looking for an invisible repeater connection, try the Ham Walking Stick. If you want five bands but cannot put wires in trees or display anything even remotely antenna-like, try the Compact Stealth Inverted L.

Stealth Antennas for Ham Radio will also help hams who want to stay unnoticed by neighbors. There are ideas for small lots, covenant-restricted properties, and many other living situations. Steve Ford, WB8IMY, kicks off the collection with safe, effective, and ethical stealth operation. "Stealth operating can be highly rewarding if you understand your limitations and work to alleviate them as much as possible" Ford says.

Try out these 28 unobtrusive stealth antennas today!

Stealth Antennas for Ham Radio is now shipping. Order from the ARRL online store or find an ARRL publication dealer; ARRL Item No. 2288, ISBN: 978-1-62595-228-8, \$22.95 retail, member price \$19.95. For additional questions or ordering, call 1-888-277-5289 toll-free in the US, Monday through Thursday 8 AM to 7 PM, and Friday 8 AM to 5 PM, Eastern Time. Outside the US, call (860) 594-0200.

Editors note: I am not hawking ARRL material. In todays HOA's this may come in handy. I've not seen this material so neither FRRL or myself endorse it.



## **Local Club Says No To Chicken Salad**

By WBØRUR

GRAND RAVINE, South Dakota –A fist fight broke out Sunday afternoon at a local amateur radio club meeting in downtown Grand Ravine. The Mt. Agnes Radio Society was discussing Field Day plans in the private room of the Village Inn while their regular meeting location, Golden Corral, undergoes much needed renovation.

food\_on\_tableTempers boiled over as the conversation went from radios to antennas to food. Local ham radio operator Walter "Scruffy" Smith volunteered to bring his "famous" chicken salad to feed the group of 20 Field Day volunteers. Instantly, five men stood up and walked to the door, stating they "...could not handle another case of 'back door trots' like last year."

Defiantly, the 82-year-old Smith challenged the group to "say that to his face" and began swinging clenched fists.

Although the five men were far across the room, police say Smith's roundhouse blow connected with 79-year-old Maggie Peterson, wife of former club president Max Peterson of Lincolnville County.

Peterson, a former Roller Derby dame in previous decades, was unscathed by the blow and in fact, challenged Smith "to take another shot if he was man enough."

Police add it is unlikely Smith would have actually hit anyone if he hadn't been thrown off-balance due to his arthritic hip and the body contact may have come as Smith was attempting to catch himself from falling.

The meeting was immediately adjourned when Village Inn manager Marguerite Thomas stormed into the room and declared there would be no senior discounts "if this ruckus doesn't stop."

For now, meal plans remain undecided for Field Day in Grand Ravine, South Dakota.





# Move to new facility was completed THANK YOU Dan WA9YKK Patrick K9ANL Gentry KE9CZW Dan KE9CWM John KC9OJV Jeff N9GAZ Todd KD9UEA and Robert WB9RMG.

73, Kermit W9XA





## Fox River Radio League

## Illinois QSO Party Oct 19th 2025

Come join the Illinois QSO Party fun....

## The Illinois QSC 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 Pixed. Portable, Mobile or Rover stations. High and Low power classes are provided for both Illinois Pixed and Non-Illinois stations and QRP competition is also provided. This is a no cost Event.

## 2025- Illinois QSO Party Date

Setup start:

**Sunday Oct 19th** 

9.00 am local

Start Operating:

Sunday at Noon

12:00 pm local

End Operating and clean up:

Sunday at Approximately

5:00 pm local

Location:

Springbrook Prairie Forest Preserve Shelter in Naperville IL

For more information on the illinois QSO Party please google filinois QSO Party. When you submit your logs identify yourself as an FRRL Member and all of our scores will be tallied toward

the dub.

## Location:

Springbrook Prairie Forest Preserve South Pavillion.

Rt 59 South to 83rd street. East on 83rd street to Pavillion Entrance.

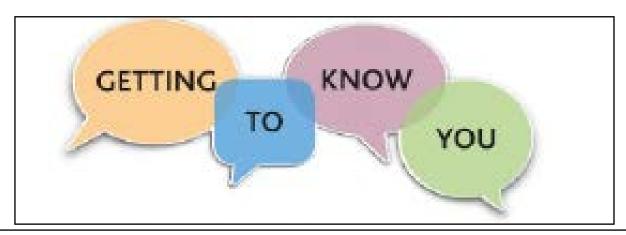
Naperville, IL

For information go to

https://w9awe.org/ilqp/







- 1. Your Name: Greg Copeland
- 2. Your Callsign: WB00ET (WN9MXH WB9MXH) Got the 0 call when I moved to lowa after school. You had to change back then!
- 3. Your License Classification: General
- 4. How long have you been a ham: 52 years (Inactive 1985 2023) Read QST monthly. I'm an ARRL Life Member.
- 5. What interests you most about amateur radio: tinkering, Digital, VHF/UHF, Helping other hams. Seeing what I can find at hamfests.
- 6. What modes do you operate: Vhf, Uhf, A little HF, FT8, and SSB
- 7. What is your most memorable QSO: My first CW contact on a Drake 2NT, A heath kit receiver I built, and a hunk of wire in the back yard. It was with the schools ham club sponsor, Frank. I cant find my old QSL cards. But I still have my first one with Frank!



- 8. How long have you been a member of the FRRL: 2 years. When looking for a local club I ran across the Arcover. I thought that a club with a huge monthly news letter has to be good. That letter is a great marketing tool. Maybe we should hand out copies at local events?
- 9. What is one piece of advice you would offer a new ham: Join the ARRL. They support our hobby and help preserve our operating frequencies, and a host of other things. Find a local club to make new acquaintances. You cant do everything yourself. It helps to have friends in the club that can help out if needed. The amount of knowledge in the FRRL is just amazing.

1. Your Name: Paul Regan

2. Your Callsign: AA9PR

3. Your License Classification: Amateur Extra

4. How long have you been a ham: Since 2000

- 5. What interests you most about amateur radio: Amateur radio never gets old or stale. I feel like everything I know about it is just scratching the surface. There's so much to challenge and engage me. I look forward to always having something new to explore.
- 6. What modes do you operate: Voice and packet on HF/VHF/UHF.
- 7. What is your most memorable QSO: Relaying a signal through the ISS was a lot of fun!
- 8. How long have you been a member of the FRRL: I think about three years now.
- 9. What is one piece of advise you would offer a new ham: **Take your time, enjoy the exploration, meet some fellow travelers, and have fun with it.**







If You Have Anything

**For Sale** 

**To Trade** Looking For/Or

To Loan

**Advertise Here** 



To advertise email: <u>NEWSLETTER@FRRL.ORG</u>



## **FREE ADVERTIZING**









Looking for those who are willing to serve as Club Officers and **Directors** 







Membership rates are as follows:

REG: Regular dues are \$30.00 per year,

FAM: Family dues are \$40.00 per year (family

members at the same address)

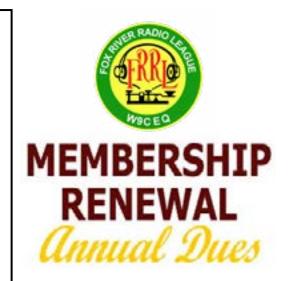
SRC: Senior Citizen dues (65 and older) are \$25.00 per year,

STU: Student (Full time, under 22) dues are \$25.00 per year.

MIL: Active Military dues are \$25.00 per year.

You can also help support the FRRL Repeaters by making a \$10.00 (or more!) annual contribution.

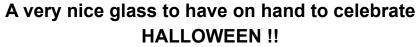
**Click Here** 





FRRL commemorative glasses are still available for \$5..







Please use this link to enjoy the pictures from the 100th Anniversary Banquet.

100th Anniversary Celebration Banquet Photos - Sept 10, 2024



**Click Here** 





	Park Number	Park Name	POTA Park#	Activated
1.	225	Silver Springs State Fish & Wildlife Area	US-1024	
2,	47	Channahon State Park	US-0987	
3.	123	Kankakse River State Park	<u>US-1004</u>	
4,	113	Iroquois County State Wildlife Area	US-4132	
5,	57	Delabar State Park Des Plaines Fish & Wildlife Area	US-0988	
6,	89	Goose Lake Prairie State Natural Aera	US-7638	
7.	155	Mazonia/Braidwood State Fish & Wildlife Area	<u>U\$-4142</u>	
В,	99	Heldecke Lake State Fish & Wildtife Area	US-12184	
9,	83	Gebhard Woods State Park	US-0995	
10.	263	William G. Stratton State Park	US-1032	
11.	109	lUni State Park	<u>US-0999</u>	
12,	235	Starved Rock State Park	US-1027	
13.	33	Bulfato Rock State Park & Effigy Turnull	US-0982	
14.	151	Matthlessen State Park	<u>US-1009</u>	
15.	61	Donnelley/Dupue State Park	US-0990	
16,	91	Green River State Wildlife Area	US-4126	
17.	101	Hennepin Canal Parkway State Park	US-0997	
18.	119	Johnson-Sauk Trail State Park	<u>U\$-1002</u>	
19,	153	Mautino State Fish & Wildlife Area	US-4141	
20,	185	Prophetstown State Recreation Area	US-4100	
21.	171	Morrison-Rockwood State Park	US-1013	
22,	161	Mississippi Palisades State Park	US-1010	
23,	15	Apple River Canyon State Park	US-0978	
24,	133	Lake Le-Aqua-Na State Park	<u>US-1005</u>	
25,	261	White Pines State Park	US-1031	
26,	145	Lowden State Park	<u>US-1008</u>	
27.	41	Castle Rock State Park	<u>US-0984</u>	
28,	79	Franklin Creek State Natural Area	<u>US-4123</u>	
29,	217	Shabbona Lake State Park	<u>US-4103</u>	
30,	131	Kishwaukee River State Fish & Wildlife Area	US-10391	
31.	115	James "Pate" Philip State Park	US-1001	
32,	249	Volo Bog Natural Area	<u>U\$-4160</u>	
33,	167	Moraine Hills State Park	US-1012	
34,	45	Chain O'Lakes State Park	US-0986	
35,	11	Adeline Jay Geo-Karis Illinois Beach State Park	<u>US-1000</u>	
36,	265	William W. Powers State Recreation Area	US-4107	

**Amateur Radio** 











List Provided by Rob Pothoff N9RLP

Note: blue underline text will not go to website

## How To Order Club Badges

Club name tag are done by: Image Awards

1031E State Street

Geneva IL

You can email your order to: <a href="mageAwards@SBCglobal.net"><u>ImageAwards@SBCglobal.net</u></a>

\*\* If using a credit card there is a 5% surcharge\*\*



Ask for the FRRLname badge and Don't forget to give them your name & call sign

## Question 1:

What type of radiation are radio signals?

- A. Gamma radiation
- B. Ionizing radiation
- C. Alpha radiation
- D. Non-ionizing radiation





## Question 2:

At which of the following frequencies does maximum permissible exposure have the lowest value?

- A. 3.5 MHz
- B. 50 MHz
- C. 440 MHz
- D. 1296 MHz

Answers On Last Page



## **Contest Corral**

## October 2025

Check for updates and a downloadable PDF version online at www.arrl.org/contest-calendar.

Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

Dat	Start - te-Time		ish ate-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1	2000	1	2100	3.5	UKEICC 80m Contest	Ph	6-char grid square	www.ukeicc.com
2	0000	3	0300	7	Walk for the Bacon QRP Contest	CW	13 WPM max; RST, SPC, name, mbr/ pwr	qrpcontest.com/pigwalk40
2	1700	2	2000	3.5	SARL 80m QSO Party	Ph	RS, serial, grid or QTH	www.sarl.org.za
2	1800	2	2200	28	NRAU 10m Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrau.net
4	0000	5	2359	No WARC	Collegiate QSO Party	CW Ph Dig	School ID or SPC, RS(T)	collegiateqsoparty.com
4	0600	5	0559	3.5-28	Worked All Provinces of China DX Contest	CW	RST, 2-character BY province or serial	www.mulandxc.com
4	0600	5	0600	1.8-28	Oceania DX Contest, Phone	Ph	RS, serial	www.oceaniadxcontest.com
4	1200	5	1159	1.8-28	Russian WW Digital Contest	Dig	RST(Q), oblast code or serial	www.rdrclub.ru
4	1400	5	1400	See rules	IARU Region 1 UHF/Microwaves Contest	CW Ph Dig	RS(T), serial, 6-char grid square	www.iaru-r1.org
4	1600	5	1100	3.5,7	International HELL-Contest	Dig	RST, serial	www.darc.de
4	1600	5	2200	1.8-28	California QSO Party	CW Ph	Serial, CA county or SPC	www.cqp.org
4	2200	4	2359	3.5,7	IARU Region 2 Area G HF SSB Contest	Ph	RS, serial	concursoareag.lu4aa.org
5	0600	5	1000	3.5	UBA ON Contest, SSB	Ph	RS, serial, ON section (if ON)	www.uba.be
5	2200	5	2359	3.5-14	Peanut Power QRP Sprint	CW Ph	RS(T), SPC, peanut no. or pwr	www.nogaqrp.org
6	1900	6	2030	3.5	RSGB 80m Autumn Series, CW	CW	RST, serial	www.rsgbcc.org
8	2300	9	0600	432	432 MHz Fall Sprint		4-char grid square	packratvhf.com
10	0001		2359	28	10-10 Int'l 10-10 Day Sprint	CW Ph Dig	Name, mbr or "0," SPC	www.ten-ten.org
11	0000	12	1559	3.5-28	Makrothen RTTY Contest	Dig	4-char grid square	www.pl259.org
11	0000	12	2359	50-1296	ARRL EME Contest	CW Ph Dig	4-char grid square	www.arrl.org/eme-contest
11	0000	11	2359	1.8-28	QRP ARCI Fall QSO Party	CW	RST, SPC, mbr or pwr	qrparci.org
11	0300		2100	1.8-28,VHF/ UHF	Nevada QSO Party	CW Ph Dig	RS(T), NV county or ARRL/RAC Section/"DX"	nvqso.com
11	0600	12	0600	1.8-28	Oceania DX Contest, CW	CW	RST, serial	www.oceaniadxcontest.com
11	1200	12	1200	3.5-28	Scandinavian Activity Contest, SSB	Ph	RS, serial	www.sactest.net
11	1500	12	0500	1.8-28	Arizona QSO Party	CW Ph	RS(T), AZ county or SPC	www.azqp.org
11	1600		2200	No WARC	Pennsylvania QSO Party	CW Ph	Serial, PA county or ARRL/RAC Section	paqso.org
11	1800	12	1800	1.8-28,50,144	South Dakota QSO Party	CW Ph	RS(T), SD county or SPC	www.sdqsoparty.com
11	2000	12	2000	1.8	PODXS 070 Club 160m Great Pumpkin Sprint	Dig	RST, SPC	www.podxs070.com
12	0600	12	1000	3.5	UBA ON Contest, CW	CW	RST, serial, ON Section (if ON)	www.uba.be
14	1800	14	1929	3.5,7	DARC RTTY Sprint	Dig	RST, DOK/"NM," or serial	www.darc.de
15	1900	15	2030	3.5,7	AGCW Semi-Automatic Key Evening	CW	RST, serial, 2-digit year first used a bug	www.agcw.de
15	1900		2030	3.5	RSGB 80m Autumn Series, Data	Dig	RST, serial	www.rsgbcc.org
16	0000		0300	14	Walk for the Bacon QRP Contest	CW	13 WPM max; RST, SPC, name, mbr/ pwr	qrpcontest.com/pigwalk20
16	1900		2000	3.5-14	NTC QSO Party	CW	25 WPM max; RST, mbr, or "NM"	pi4ntc.nl
18	0000		2359	3.5-28	JARTS WW RTTY Contest	Dig	RST, age of operator	jarts.jp
18	0001		2359	28	10-10 Int'l Fall Contest, CW	CW	Name, mbr or "0," SPC	www.ten-ten.org
18	1400	_	0200	No WARC	New York QSO Party	CW Ph Dig	RS(T), NY county or SPC	www.nyqp.org
18	1400		0200	No WARC	YLRL DX/NA YL Anniversary Contest	CW Ph Dig	Serial, RS(T), ARRL Section or PC	ylrl.net/contests
18	1500	19	1459	3.5-28	Worked All Germany Contest	CW Ph	RS(T), DOK or "NM" or serial	www.darc.de
18 18	1500 2000	19 18	1500 2359	1.8-28,50	Stew Perry Topband Challenge Feld Hell Sprint	Dig	4-char grid square  Mbr, SPC, grid square	www.kkn.net/stew sites.google.com/site/ feldhellclub
18	2130	18	2330	7	Argentina National 7 MHz Contest	Ph	RS, 2-digit year first licensed	www.lu4aa.org
19	0000	_	0200	14,21	Asia-Pacific Fall Sprint, CW	CW	RST, serial	jsfc.org
19	0700	_	1000	144	UBA ON Contest, 2m	CW Ph	RS(T), serial, ON Section (if ON)	www.uba.be
19	1700		0100	1.8-28,50,144	Illinois QSO Party	CW Ph Dig	RS(T), IL county or SPC	w9awe.org/ilqp
19	2300	_	0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or pwr	qrpcontest.com/pigrun
20	1300	24	2359	No WARC	ARRL School Club Roundup		RS(T), class (I/C/S), SPC	www.arrl.org/school-club- roundup
22	2000	22	2100	3.5	IRTS 80m Counties Contest	CW Ph	RS(T), serial, El/Gl county (if El/Gl)	www.irts.ie
23	1900	23	2030	3.5	RSGB 80m Autumn Series, SSB	Ph	RS, serial	www.rsgbcc.org
25	0000	26	2359	1.8-28	CQ Worldwide DX Contest, SSB	Ph	RS, CQ zone	www.cqww.com
25	0800	25	1400	902 and above	902 MHz and Up Fall Sprint	CW Ph Dig	6-char grid square	packratvhf.com
26	1300	29	0700	1.8-28,50,144	Classic Exchange, CW	CW	Name, RST, SPC, rcvr/xmtr model	www.classicexchange.org
27	1900		2100	3.5-28	RSGB FT4 Contest	Dig	Signal report	www.rsgbcc.org
29	2000		2100	3.5	UKEICC 80m Contest	CW	6-char grid square	www.ukeicc.com
31	1500	31	2359	3.5-28	Zombie Shuffle	CW	RS(T), SPC, Zombie no. or area code,	www.zianet.com
							name	

There are a number of weekly contests not included in the table above. For more info, visit: www.qrpfoxhunt.org, www.ncccsprint.com, and www.cwops.org. All dates and times refer to UTC and may be different from calendar dates in North America. Contests are not conducted on the 60-, 30-, 17-, or 12-meter bands. Mbr = Membership number. Serial = Sequential number of the contact. SPC = State, Province, DXCC Entity. XE = Mexican state. Listings in blue indicate contests sponsored by ARRL or NCJ. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. Data for Contest Corral is maintained on the WA7BNM Contest Calendar at www.contestcalendar.com and is extracted for publication in QST 2 months prior to the month of the contest. ARRL gratefully acknowledges the support of Bruce Horn, WA7BNM, in providing this service.

## FRRL Groups.io Group Message Board

By Curt Sauer W9YNP

The FRRL has an active mailing list group on Groups.io. Members in good standing are eligible to join the mailing group. You should receive an invite upon joining the group to the email listed in your application. Your active club membership is required to be a member of our Groups.io group.

The group provides the following features:

Messages/Mailing List

View the calendar

Access to files including the club Bylaws and Membership Roster Access to photos submitted by members. Great for sharing projects you're working on!

How do I join?

When your FRRL club membership is confirmed you will receive an email invite from Groups.io. The club membership form requests an email to be used by the club or members to contact you for club or ham radio related subject. If you already have a Groups.io account under a different email and wish to combine them there is a second field for that email. If it is filled in, you will get the invite in that email.

When you join, you can choose a profile you'd like to display to the group, select the email address at which you'd like to receive group messages, choose how you receive group messages, and more. You can receive messages via email or by reading the message boards within the group.

If you have questions or changes please contact the Group Administrator: GroupAdmin [at] frrl.org.

## GOUPS.IO - It's more than just messages.

When you first login to your groups.io account, at <a href="https://groups.io">https://groups.io</a>, you will be presented with a list of the groups that you belong to.

Click on FRRL|Members

You will now see the groups messages in the right window pane and the navigation pane on the left.

Messages are the bulk of what we share and there are a lot of them. The web page has a very useful search function to find exactly what you want.

The following are a few sections that some members may not be aware of.

#### Photos:

Members may share photos of Ham related activities here.

Show us a picture of your shack or your latest restoration/repair.

As long as it's Ham Radio related you can put a pic here.

Just click on the "New Album" button to add your photos.

## Calendar:

This doesn't have much in it at the moment, just meeting and Net reminders, but more is planned.

#### Files:

This is where the important things are stored.

Example, the club roster is located in a directory called "Roster and ByLaws"

If you can't sleep and want to read the club's ByLaws, they are here as well.

Many of the presentations given after the meetings are also here.

Between GROUPS.IO and the club web page at https://frrl.org you are sure to find the FRRL information that you are looking for.







# W9CEQ Radio Nets





Sunday
All Operators Net
1900 hrs (7pm) local time
147.21 103.5PL +600

## **Monday**

1930 hrs (7:30pm) local time 28.420 USB Phone 2000 hrs (8pm) local time 28.150 CW 2030 hrs (8:30 pm) local time 28.720 USB Phone









## Tuesday

1930 (7:30 pm) local time 147.21 103.5PL +600 Except for the 2nd Tuesday of the month



## Wednesday

1930 hrs (7:30pm) local time 223.860 110.9kHz PL -1.6Mhz

We will have an informal net with checkins and a question of the day. The goal of the net is to encourage 220 usage along with getting to know your fellow 220 Mhz users so that we can exchange usage and coverage data to ensure that we have one of the best 220 repeaters in the area.





**Technician Class** 

**Wednesday Evenings** 6:30 P.M. to 9:30 P.M.

Start: 9/20/2025 End: 12/3/2025

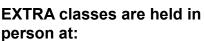


**Tech & General classes** are done on Zoom. The Meeting Link to be distributed prior to the class.



Wednesday Evenings

Start: TBD End:



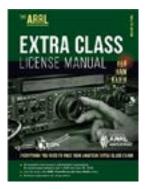


113 Oak St, North Aurora, IL 60542

**Extra Class** 

Saturday Mornings 9:00.AM. to 12:30 P.M.

> Start: TBD End:



The Fox River Radio League (FRRL) presents regular training classes focused toward new Amateurs interested in gaining their Technician class license or upgrading to the General and Extra class licenses.

These are free courses where you will learn everything you need to receive or upgrade to the appropriate FCC radio license.

The textbook for the class will be the official ARRL License Manual. Books are available for purchase through the ARRL website.

Classes are instructor-led, and you can expect engaging conversations to ensue around the topics of discussion.

In addition to our regularly scheduled bi-monthly testing we will be scheduling a dedicated VE session after discussing best availability with the class participants. For more information on **VE** sessions, please see **VE** Test Sessions.



Please Note that Tech & General classes are 9 weeks long.. Extra classes are 12 weeks long. You can contact Dan Nolan at: Education@frrl.org if you have any questions



Students should read the material in advance of the class. Also bring an inexpensive calculator like a TI-30 x and a notebook and pencil or pen.

## **VE Testing**

The FRRL, in conjunction with the ARRL VEC, sponsors regular amateur examinations the third Thursday of every odd month. Ad-hoc sessions are planned during major events and will be added to the schedule here as well.

Upcoming Testing Schedule for 2025

January 16 March 20 May 15 July 17 September 18 November 20 For 2025

VE'S Needed!!



Testing Location: Geneva Lutheran Church 301 S 3rd St, Geneva, IL 60134

Please also be sure to bring:

- Photo identification
- Your FCC generated FCC Registration Number (FRN).
- The fee of \$15.00. (The FRRL receives no portion of this fee.)
- If upgrading bring your original FCC HAM Radio License (or the documentation you received) and a photocopy of your license.

If you have questions about the testing program, please email the Chairman at: ve@frrl.org

## Illinois Traffic Net

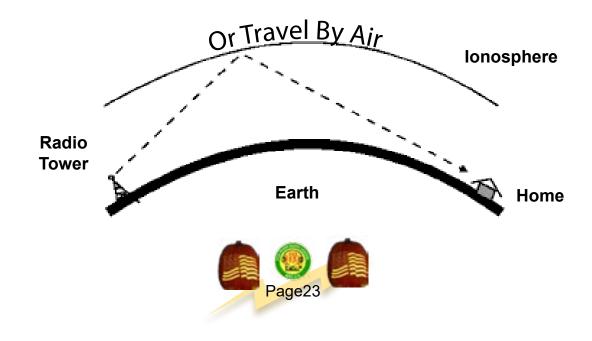


You can also participate in one (or all) of the Illinois Traffic Nets. Everyone is welcome with or without traffic. The nets are the North Central Phone Net, Daily (M-F) at 7 a.m. local time, on 3912 kHz LSB; the Illinois Phone Net, Monday – Friday at 4:45 p.m. local time, on 3857 kHz LSB and on Sunday at 8 a.m. on 3940 kHz; and the Illinois Sideband Net, Daily at 6 p.m. local time, on 3905 kHz LSB.





Date	Time	Event	Location	Sponsor	Cost	Talk-In	Notes
10/04/2025	8:00AM - 11:00AM	Antique Radio Club Swap Meet	570 S. Gary Ave, Carol Stream IL	Antique Radio Club of Illinois	Free!	No talk-in	Donation sales - occurs five times per year
10/11/2025	8:00AM	SMC Fest	Bloomington- Normal Marriott Hotel & Conference Center	Society of Midwest Contesters	\$75	No talk-in	Registration must be completed by end of day October 6, 2025
10/18/2025		Chicago Suburban Radio Association Swapmeet	Westchester Community Church 1840 Westchester Blvd. Westchester, IL 60154	Chicago Suburban Radio Association		146.880 MHz offset 600 MHz PL 107.2	



Date	Sponsor	Notes
Oct 12, 2025	CHICAGO MARATHON  Chicago, Illinois  Ham Radio Chicago	Chicago hosts one of the seven major world marathons. It's one of the largest races in the world by number of finishers — over 50,000! Hundreds of amateur radio volunteers play a vital role in managing communications across the route in close partnership with medical teams, emergency service teams, race organizers, and others. Click the HERE to volunteer through Rob Orr at Ham Radio Chicago.
Oct 18, 2025	CANTIGNY 5K WALK/RUN  Wheaton, Illinois  DuPage County Areas	Enjoy beautiful Cantigny Park and it's golf course and historic grounds while helping monitor the route, help ensure participant safety, and maintain communications and readiness to assist in the event of any emergencies. Click HERE to volunteer through Dan Kyburz (AA9DK) and DuPage County Areas.
Oct 26, 2025	SYCAMORE PUMPKIN FESTIVAL PARADE Sycamore, Illinois Kishwaukee Amateur Radio Club	Help the team 'stage' parade participants, track their progress, monitor spectators and the parade route, and coordinate with organizers. Click HERE to volunteer through Robert Yurs (W9ICU) and the Kishwaukee Amateur Radio Club (KARC

Volunteering in amateur radio offers a multitude of benefits, catering to diverse audiences and providing valuable resources and opportunities. Here are some key reasons to get involved:

Personal Enjoyment and Hobby: Many find operating ham radio to be a fascinating hobby, offering opportunities to communicate with people around the world and experiment with different modes of communication.

- Emergency Communication: Ham radio operators often play a crucial role in emergency communication, providing a lifeline for emergency responders and communities during disasters.
- Technical Learning: Ham radio provides a hands-on way to learn about radio communication technology, electronics, antennas, and more.
- Community and Social Connections: Ham radio enthusiasts form a global community, participating in clubs, nets, and events to foster friendships and mentorship opportunities.
- Public Service: Many hams engage in public service activities, such as providing communications support for marathons, parades, and other community events.







www.AmateurRadioEvents.com

### The Radio Amateur's Code

The Radio Amateur is...

CONSIDERATE... He never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...He offers loyalty, encouragement and support to other amateurs, local clubs, the IARU Radio Society in his country through which Amateur Radio in his country is represented nationally and internationally.

PROGRESSIVE... He keeps his station up to date. It is well build and efficient. His operating practice is above reproach.

FRIENDLY... He operates slowly and patiently when requested; offers friendly advice and counsel to the beginner; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit.

BALANCED... Radio is a hobby, never interfering with duties owed to family, job, school or community.

PATRIOTIC... His station and skills are always ready for service to country and community

...adapted from the original Amateur's Code, Written by Paul M Segal, W9EEA, in 1928



John Devoldere 0N4UN and Mark Demeuleneere 0N4WW

Taken from: Ethics and Operating Procedures for the Radio Amateur.

# Bring back "RADIO IN THE PARK"

Harry Jones K9DXA" started "Radio in the Park" years ago. His idea was take your radio out to a local park and set it up and operate. Since we can't have any thing big, just take your rig, wear your mask, set up an antenna, radio and have fun.

The idea of this is bring ham radio to the public. Make a small sign with your name, call sign, and please add FRRL also. Would like some photo of your operation. May get someone to take a picture of you operating. Will try to get your picture into the news letter. Please send a short report to me at my FRRL address.















There are plenty of volunteer organizations that could use your radio skills.



Consider volunteering you can make the difference!!









The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES. Training may be required or desired to participate fully in ARES. Please inquire at the local level for specific information. Because ARES is an amateur radio program, only licensed radio amateurs are eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership.

## **ARES**

Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES.

## ARES Resources

**Download the ARES Manual [PDF]** 

- ARES Field Resources Manual [PDF]
- ARES Standardized Training Plan Task Book [Fillable PDF]
- **Emergency Communications Training**

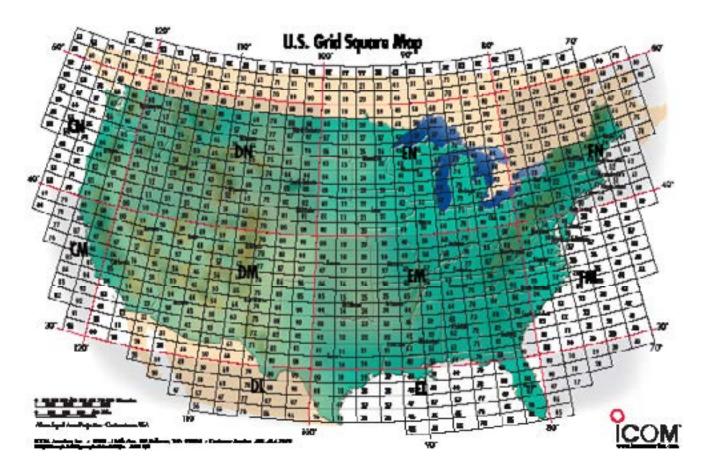


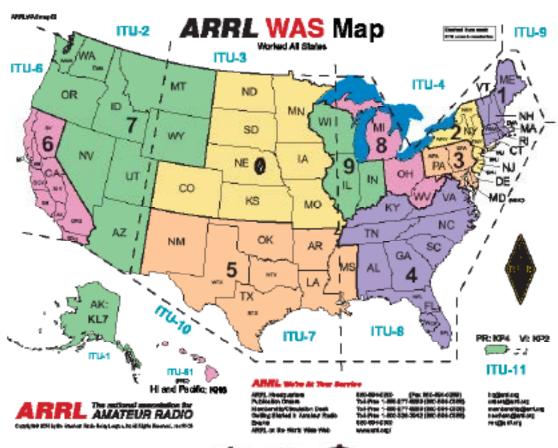
Information

**Click Here** 





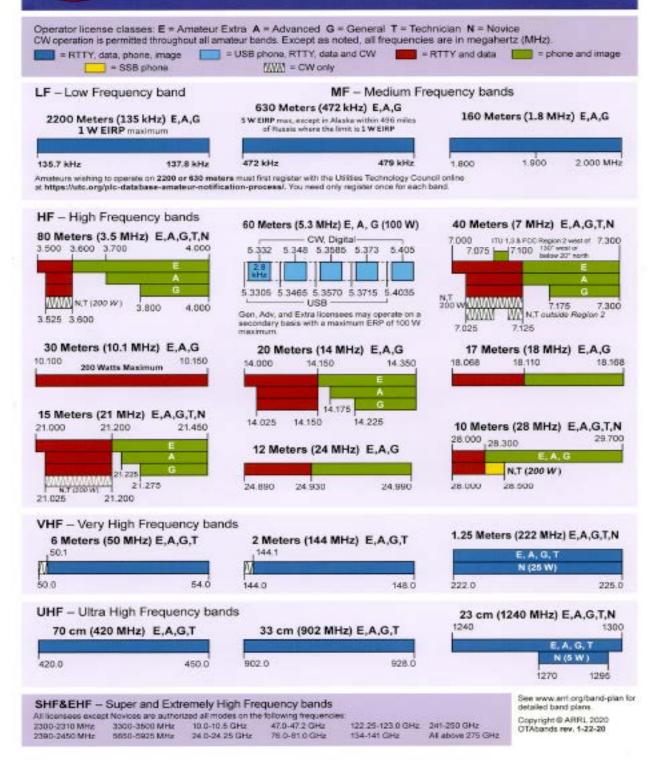






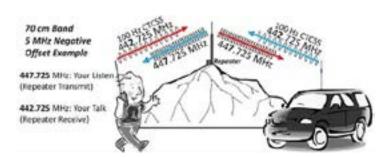


## **US Amateur Radio Bands**









CAL PEDENTERS

## FRRL Repeaters-W9CEQ

147.225 MHz - Plano

Mode: Auto C4FM / Fusion, FM, Wires X +600 KHz Offset, 100.0 Access Tone

147.21 MHz - Elburn

Mode:FM (Echolink Available)W +600 KHz Offset, 103.5 Access Tone



Mode: FM

+5 MHz Offset, 114.8 Access Tone

223.86 Mhz - Aurora

Mode FM

-1.6 Mhz Offset, 110.9 access Tone

442.10625 MHz (B) - Elburn

Mode: D-Star +5 MHz Offset

> Other Area Repeaters W9XA

53.910 - Batavia

-1.0 MHz offset PL 114.8 Hz

**224.4 MHz** - Batavia

-1.6 MHz offset PL 103.5 Hz

443.64375 MHz - Elburn

+5 MHz offset DMR 311759

443.65625 MHz - Plano

+5 MHz offset DMR 311760

1292.00 MHz - Batavia

-20 MHz 114.8 Access Tone

927.625 - Batavia

+25 MHz offset PL 114.8 Hz

**W9DWP** 

145.270 MHz - Elburn

-600 KHz offset PL 107.2 ARES APCO P25 NAC 293



## **NIARC W9ZGP**

**147.06 MHZ - Batavia** 

Mode FM +600 kHz offset PL 103.5.

Auto C4FM / Fusion, FM, Wires X Repeaters

## K9IIK/R

442.275 MHz - Schaumburg

Mode: Auto C4FM / Fusion, FM, Wires X

+5 MHz, 114.8 Access Tone

W9CHI

444.600 MHz - Channahon

Mode: Auto C4FM / Fusion, FM, Wires X 30024

+5 MHz, 136.5 Access Tone

KD9FA

443.600 MHz - Oswego

Mode: Auto C4FM / Fusion, FM, Wires X

+5 MHz, 107.2 Access Tone

KC90EM
Primary Kane County SKYWARN / ARES

145.470 MHz -St Charles

Mode: FM

-600 Offset, 103.5 KHz Access Tone



444.525 MHz -St Charles

Mode: Auto C4FM / Fusion, FM, Wires X

+5 MHz Offset, Access WWTone114.8



ANSWERS Q1 "D" Q2 "B"