

Along with classifieds, SKCC stuff, and more!



This evening I was popping out the back door to see which direction the rotatable dipole was facing as I was attempting to work A25R (it's on a TV antenna rotator) and realized that this Halloween was very cold and snowy. Despite the good HF conditions this evening, I am going to miss the gorgeous weather that W9SAN mentions in the Foxhunt Chronicles.

This edition of HamNews includes a special article that explains that the FCC is likely to vote to eliminate the existing symbol rate restriction on HF data transmissions. Thank you to Bob, K0NR for permission to republish his article.

This fall I had hoped to sponsor a new Technician licensing class for the local community. I still hope to do this, but it will likely be delayed until after the first of the year. (I have been occupied with a special series of licensing events at work. I am hoping that 6-8 university students will shortly be newly licensed hams! The students and I have been having fun with this.)

This fall I am continuing to have fun with working a few of the FM satellites (mostly the ISS and SO50). My goal is to work and confirm 100 grid squares to obtain the VUCC award with a satellite endorsement. You can try satellites out too!



Don't forget about the Fort Wayne Hamfest that is coming up later this month on November 18th and 19th. Please attend and/or volunteer to support this important local event.

Lastly, I want to express my sincere gratitude to each of the HamNews authors who consistently share their talents to make this monthly publication a reality. Working with each of you is a pleasure.

Happy Thanksgiving to you and loved ones!

73 and catch you at the Fort Wayne Hamfest in a few weeks,

## Josh W9HT



# ALLEN COUNTY HAMNEWS

HamNews is a monthly, joint publication of the Fort Wayne Radio Club, the Allen County Amateur Radio Technical Society, and the Fort Wayne DX Association.

Articles are written by members and friends of the three clubs. New submissions for HamNews are always welcome. Please send your information to the editor within two days of the end of the month for inclusion in the next edition.

> HamNews Editor Josh Long, W9HT drjoshlong (at) gmail.com

# 51<sup>st</sup> FORT WAYNE HAMFEST & Computer Expo

# **ARRL Central Division Convention**

Ham Radio License Testing All Classes (\$14) 9 AM till 12 PM Saturday

WAS & DXCC Card Checking and CQ Awards

Youth Lounge (under 12 accompanied by adult)

New & Used Ham Equipment Dealers Main & Hourly Door Prizes 2 Rooms of Special Interest Forums All Day Saturday

Talk-in Radio Frequency 146.880 (-)

Tables: \$30 Regular, \$50 Premium, \$33 Electricity Drive Directly to Your Table for Setup



2023

SAT 9 AM to 4 PM SUN 9 AM to 2 PM

Admission: \$8 Sat & Sun \$4 Sun only Children under 12 free (with adult)

Allen County War Memorial Coliseum 4000 Parnell Ave Fort Wayne, IN 73,000 sq. ft. all indoors (Coliseum Parking \$8 per vehicle)

Get the latest information at www.fortwaynehamfest.com www.facebook.com/FTWAYNEHAMFEST/ Contact (260) 579-2196 , PO Box 10342, Fort Wayne, IN 46851





## Skywarn Recognition Day Dec. 1-2

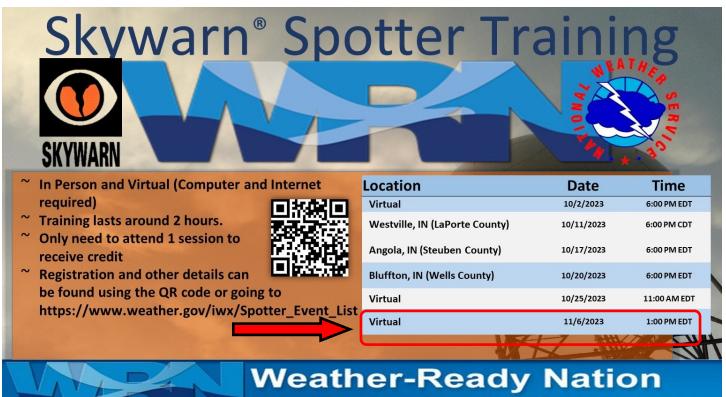
The National Weather Service (NWS) plans

its annual 24-hour event to recognize Skywarn storm spotters, especially spotters who are ham radio operators, at the beginning of December. The event will begin at 0000 UTC Dec. 2, which is 7 p.m. ET



Friday, December 1. During Skywarn recognition day, ham radio special event stations will operate on HF and other bands from NWS offices around the nation. The NWS encourages hams to contact as many of those special event stations as possible within 24 hours.

The Northern Indiana NWS office near North Webster has a new warning coordination meteorologist. Dustin Norman started work at that office September 25. At press time, Norman had not announced whether the Northern Indiana office will host a special event station this year or what local club would set up such a station. In past years, the office was unable to welcome "drop in" operators and instead required hams to schedule operating time in advance. Watch the Fort Wayne Radio Club website and Facebook page for updates as they become available.



National Oceanic and Atmospheric Administration



# Update for October 2023

We had another great month on the LRBN -" Little Red Barn Net." We meet Monday through Friday at 9:00am or 13:00z on 3.820 MHz LSB. We have about 12 to 20 check-ins per day, with self-generated topics each day by the check-Ins, but Thursday when Jack W9GT picks a topic--we kind of run with it, a lot of fun. On Friday, we have Ron Gregory W9RGM, a WOWO celebrity. Ron did the evening show on WOWO years ago.

Also, we have a lunch every two weeks alternating from North Fort Wayne to South Fort Wayne. We usually have 15 to 25 participants at each lunch. We had two lunch's this month on 10/12/2023 at the Back 40 in Decatur and 10/26/2023 at Big Eyed Fish.

Always a great time to eat, and socialize with friends. Next dates would be 11/9/2023, 11/23/23, 12/7/23.... at 11:30am on each date.

If you want to be on the LRBN email list, let me know at <u>gmrepair1@aol.com</u>, or message me at 260-437-4676 with your email and call sign or name.

Net control operators are Monday KU8T

Tom, Tuesday K9FW AI one round Net, Wednesday KD9HAV Norm, Thursday W9GT Jack, Friday W9RGM Ron Gregory or K9SKS Steve.

We have a mobile web page at <u>https://gmrepair1.wixsite.com/mobile</u> works with mobile and computers systems. On the mobile page is lunch information along with times, dates, pictures of previous lunches and other information.

Also we have at <u>lrbn@groups.io</u>. This is where we vote for the next lunch. Let me know if you need help, I can invite you.

Also, net controls use Netlogger you may down load the program at Download Center at <u>www.netlogger.org</u>. Also, for smartphones there is Net Scraper, on the android go to Play Store, and on Iphone go to App Store and download this app.

73,

KU18T Tom





From the FWRC **President:** Larry KB90S



We are not having a general meeting for the month of November. Instead, we are having a field trip that is open to all club members and guests.

Kevin Hecksher, EE, W9KMH is a partner at R&K Digital. Kevin is going to host us at his business in November. He will talk about the new generation of batteries. He will also demonstrate how to charge them and the pit falls of incorrectly charging 73, them.

There is a lot of misunder- Larry, KB90S standing about the new batteries and the new technology that surrounds them. The old acid batteries the your father use is not the same as we will have. This will

be on November 10th at 6:30PM. The address is is 3821 Superior Bridge Drive. This is right across the road from Channel 39's tower.

Please be sure to RSVP to me or any other board member if you would like to attend.



See you at R&K Digital and at the hamfest in a few weeks!

## **No FWRC General** Meeting this month

Read Larry's article for information about the local field trip instead this month!

### FWRC Officers 2023

President Larry Temenoff, KB9OS (260) 490-3089 temenoff(at)pfw.edu

Vice President Josh Long, W9HT (260) 749-9851 drjoshlong(at)gmail.com

Secretary Al Burke, WB9SSE (260) 637-1989 aburke55(at)comcast.net

Treasurer Bob Streeter, W8ST rdstre(at)yahoo.com

Communications Manager Charles Ward, KC9MUT (260) 749-4824 kc9mut(at)yahoo.com

Directors Steve Nardin, W9SAN (260) 482-4039 w9san(at)arrl.net

Carla Barrett, KD9ITZ

Terry Bowman, K9FMX (260) 705-7128 tjbowman(at)frontier.com

Carole Burke, WB9RUS (260) 637-1989 wb9rus(at)comcast.net

### FORT WAYNE RADIO CLUB MEETING MINUTES

### 13 October 2023

The October meeting of the Ft. Wayne Radio Club was held at the Good Shepherd United Methodist Church (GSUMC) on 13 October 2023. The meeting started at 6:30 pm.

Vice President Josh Long (W9HT) welcomed all attendees (about 35), led them in the pledge of allegiance, and had everyone introduce themselves by virtue of their name & callsign.

Bob Streeter, W8ST provided the Treasurer's report as of 13 October, 2023 indicating the following account balances:

Savings-	\$502.40
Checking-	\$6,631.83
Vanguard Money Market-	\$16,956.10
Year-to-Date Income-	\$4,402.50
Year-to-Date Expenses-	\$2,194.75
Club members-	149
Prepaid 2024 members	6

Josh reopened nominations for CY2024 club Officers and BOD positions. There were no new names offered so the slate was as follows:

President-Adam Warrix (KD9NRT)

Vice President- Meghan Warrix (KD9ODP)

Treasurer- Bob Streeter (W8ST)

Secretary- Al Burke (WB9SSE)

Communications Manager- Charles Ward (KC9MUT)

Editor- Josh Long (W9HT)

Board of Directors (pick three):

Carole Burke (WB9RUS)

Jim Stephens (KD9NYZ)

Terry Bowman (K9FMX)

Tom Rupp (KU8T)

Steve Nardin (W9SAN)

Jim Pliett (K9OMA)

Since there was only one person running for the club Officers positions those running were elected by acclimation. Candidates elected to the three Board of Director positions were:

Steve Nardin, Terry Bowman, and Jim Stephens

The fourth Board position was automatically filled by outgoing President Larry Temenoff (KB9OS).

Al Burke addressed a proposal to purchase a Tait TB-8100 vhf repeater to replace the Bridge-Comm hardware currently installed for 146.16/.76 at Robison Park. The Board had grappled with the poor reliability of the two vhf Bridge-Comm units (used for the 146.31/.91 and 146.16/.76 machines at Robison Park and PFW) several years ago and decided to replace them. In early 2022 a Tait TB-8100 was purchased for the .91 machine, was installed, and we have been pleased with its performance. All had been on the look-out for a second machine for over a year and finally found one on eBay, from the same seller we bought the first unit from.

The price is \$985.00 including taxes and shipping. The Board requested authorization to spend up to \$1,000.00 to cover any additional expenses. A motion was made to approve the request, seconded and then voted on in the affirmative by all members present. We expect to receive the new unit in about two weeks.

Steve Nardin announced that the club had reserved several tables at the Fort Wavne Hamfest to occur on 18-19 November at the Coliseum. We need several additional volunteers, other than the usual Board of Directors contingent, to help in manning the tables to give the Board members a little relief and a chance to check out the vendors themselves rather than be stuck at the club's tables during the entire event. Any club member is welcome to use the clubs tables to offer equipment for sale. But likewise a person using the tables is expected to man the table for at least one hour and provide contact information, clear and concise data regarding the item they are trying to sell, including its condition and the minimum price they are willing to accept for the item. Contact any Board member if you're interested in making use of a table or if you are able to provide a little relief during the Hamfest.

The FWRC will again this year run a promotion to induce folks to re-up their club dues for 2024 or join the club as a first time member. The promotion will

run from now thru the end of the Hamfest and will feature the raffle of a <u>Yaesu FT-2800M</u> 2 meter, 65 watt mobile transceiver. Every person who re-ups or joins will have one chance at winning the FT-2800M and we will likely offer additional chances to win the unit at a modest price. The winner will be chosen at the end of the Hamfest on Sunday afternoon.

Steve then discussed the plans for disposal of items from the K9EA, Dan Michnay's estate. The club has inventoried at least 82 commercial ham radio related items and a number of home brew vhf thru ehf antennas plus uhf thru ehf home-built gear that Dan built.

The commercial items will be initially offered to Fort Wavne Radio Club members only, via a silent auction using the internet. The Board will establish bid reserves for the higher dollar value items. A spread sheet identifying each item with a picture of the item, if available, and its condition will be emailed to all FWRC members of record. Then club members can bid on any item of interest. The auction will commence soon and will end before the start of the Ft. Wayne Hamfest. Any items not purchased via the auction will be offered for sale to the general public at the Hamfest.

We are currently deciding on how the home-brew antennas and home-brew gear will be offered and disposed of, but it will likely not be via the silent auction used for the commercial items. It will, however, be addressed before the Ft. Wayne Hamfest.

Josh announced that the November club meeting will be a field trip to R&K Digital, hosted by Kevin Hecksher, W9KMH. Kevin is a partner in R&K Digital and is going to inform us about the new generation of battery technology. The old lead-acid batteries your father used are not the same technology available now. He will demonstrate how to safely charge these new batteries and the pit falls of charging them incorrectly. We will meet at 6:30 pm on 10 November at 3821 Superior Bridge Drive, just south of the WFFT complex on the west side of Hillegas Rd. If you are planning to attend please RVSP to Larry Temenoff (260-490-3089, temenoff@pfw.edu) as R&K Digital needs to know how many chairs to rent to accommodate our crowd.

Ken Rogner, N8KR noted that apparently spurs from ACART's 146.88 machine were showing up at 146.910 MHz He asked what could be done about it. Al Burke noted that we were aware of the issue and that he and Jim Pliett, K9OMA were planning to meet with ACARTS at the 146.88 repeater site this Saturday to determine what might be going on with the 146.88 hardware, and to correct it if possible.

Following the business meeting Ken provided a program describing a means of remote control of his Icom 7610 utilizing an App called SDR Control available for \$50.00 that allows him to control his station in FWA from anywhere, including his winter hideaway in Florida. Very interesting technology indeed.

The meeting concluded about 8:15 pm.

Respectfully submitted,

Al Burke, WB9SSE

Secretary, FWRC



# FWRC Auction Results

The FWRC on line auction is complete for now. I want to thank everyone for their participation and patience with the entire process. For the most part the auction went very smoothly and hopefully all the winners will be happy with their purchase. A total of 81 items was originally listed, but about 4 were withdrawn for various reasons. The FWRC included a military R390 receiver in the auction and this was a leftover from Adolph Wozniak's estate.

The total intake of the auction is projected at \$4580.00, which the club will use to maintain its mission with local Amateur Radio activities including repeaters, Field Day and other on the air events, and our planned license classes as well.

Details on how you can pick up your winning item will be coming shortly. The items are spread between 3 locations, so a plan is being made got easy distribution. The Robison Park repeater shack is one place, the QTH of Terry Bowman, K9FMX is another. The vast majority of items are at these two places. Stand tuned for more information!

But, we really are not done yet! There are several piles of coax, home brew antennas, and home brew amplifiers that are yet to be sold, so stand by for more info on these as well. And the club has 2 other SK auctions coming up, too.

So stay tuned, details on picking up items are in the works!

73, Steve, W9SAN



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# State of the Arts

Allen County Amateur Radio Technical Society

P.O. Box 10342, Fort Wayne, IN



We have turned the corner and Hamfest 2023 is coming up quick! And it will be a great one!

Our November Board meeting will be going over last-minute things our mangers are needing help with.

On to the 88 repeater. We seem to be up and running with a temporary machine, Thank you Jim Pliett for lending us the machine. We have a cou- 73, ple PA's that need repaired or just replaced. Thanks to all that helped with getting this figured out!



The November elections for the ACARTS board will be held during our November 21st general meeting at the Allen **County Library Dupont** Road Branch. Please come and cast your vote and nominations.





I'll see you at the hamfest on the weekend of November 18 and 19th!

Thank you all!

Chris, W9TSB



### **ACARTS Officers** 2023

President Chris McCullough W9TSB 260-312-2750 kd9lrw(at)gmail.com

Vice President Dan Dahms N9WNH 260-503-4163 n9wnh(at)arrl.net

> Secretary (open)

Treasurer Howard Pletcher N9ADS 260-747-5252 n9ads(at)arrl.net

Station Manager Jim Sampiere KD9NPL 260-999-8132 Kd9npl(at)gmail.com

Fundraising Manager Fred Gengnagel KC9EZP 260-704-7801 kc9ezp(at)gmail.com

**Directors at Large** 

Steve Shannon K9SKS 260-704-5353 k9sks(at)aol.com

Stuart Hall KD9LFW stuarthall(at)aol.com

James Bassett KD9WCX 260-438-6664 Trrrrbo(at)aol.com

**W9INX Trustee** Dave Lindquist W9LKH 260-485-6135 w9lkh(at)comcast.net



# **INDIANA TRAIL 100**

Several local hams recently supported the 2023 Indiana Trail 100 event. Thanks to everyone who participated and to Jim, KD9NYZ for the photos of the event!



## **Daily MUF vs Daily Sunspot Number**

Carl Luetzelschwab K9LA

As you're probably aware, the daily ascent of a solar cycle is not a monotonically increasing function. The daily values (whether it be sunspots or 10.7 cm solar flux) can go up, the daily values can go back down and then the daily values can go back up again. This is easily seen at https:// www.solen.info/solar/.

How does this up-and-down of the daily values affect the ionosphere? Let's look at last month – October 2023.

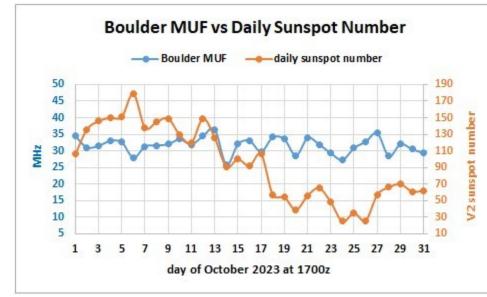
The daily sunspot number started at 106 on October 1. It then increased to 179 on October 6. It then decreased to a low of 25 on October 24. The last days of October showed a steady increase to around 70. That's quite a swing – from a high of 179 to a low of 25 – but you can easily see that kind of swing in the data at https:// www.solen.info/solar/.

Next, I downloaded the F2 region critical frequency (foF2) values at the Boulder ionosonde at 1700 UTC for every day of the month. Knowing that the F2 region MUF (maximum useable frequency) is approximately 3 times the F2 region critical frequency, we can determine the MUF over the Boulder ionosonde assuming Boulder is the midpoint of a 3000 km hop via the F2 we need a more long-term region. As a side note, Boulder is close to the mid-

point of the 3000 km path from the Midwest to California, so it's a good indicator of working W6 on the higher HF bands. Real-time Boulder F2 MUF and foF2 can be viewed on the NØNBH banner on the home page of https:// www.qrz.com/ and at https://www.ngdc.noaa.gov/ stp/IONO/rt-iono/realtime/ BC840 foF2.png, respectively. Here's the daily sunspot data and daily MUF data.

This plot is a great example of why we don't have daily propagation predictions the F2 region MUF today does not correlate very well to today's sunspot number (this also applies to the daily 10.7 cm solar flux). The MUF held up when the sunspot number significantly decreased. This suggests value of the sunspot number.

As a result of this kind of data, we have monthly median propagation predictions (median implies a 50% probability) that are correlated to a smoothed sunspot number (very longterm average of sunspots) for the desired month. In other words, our understanding of the ionosphere is statistical, not deterministic.



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### October

The first Sunday of October, which was on the first day of the month, was beautiful in a long string of nice days. Temperatures were moderate and hovered around the 80 degree mark. A great day for the second to the last Fox Hunt of the year 2023! The foxes were the team of Linda, W9LAN, and spouse Steve, W9SAN. They had chosen the small parking lot at the trailhead on Hursh Road for the north side of Metea Park in Leo-Cedarville to hide the high power fox and low power microfox.



Arriving a little late, they started the hunt at 1:35 EDT. Back at the start point near the geographic center of Allen County, Indiana, there were two teams: Charles, KC9MUT, with friend Angie, and Jim & Al, K9OMA & WB9SSE respectively. Power for the high power fox was supplied by Steve's LiFePo battery driving a Yaesu FT -1900 2 meter rig with a W9TAX roll up dual band J-Pole vertical hung in a nearby tree. The microfox was a Byonics model 15 of about 15 milliwatts (it belongs to the FWRC) rolled up in a black bag hidden under a downed tree branch with lots of leaves. Starting out at 50 watts into the vertical, the teams both heard the fox weakly but enough

for an initial bearing and away they go!



The Matea Park North trailhead parking lot was small, and there were a lot of people taking advantage of the nice weather, so we worried a little that the hunters might have to get creative with parking. As time wore on several cars left the lot so this fear went away. The first 4 transmissions were at 50 watts output, then about 3 transmissions followed at 25 watts. We were just ready to reduce further to 10 watts when we noticed Charles' silver RAM truck pull in. did not come back at the proper time. It was obvious that the battery had died! No one had found the micro yet, so Steve grabbed his personal micro fox, wrapped it in a plastic bag, and stealthy hid it under some leaves behind the car. Right at this time, the Pliett/Burke team rolled into the lot and immediately starting searching for the fox. With both teams here, the high power transmissions were stopped right away.





To add an element of doubt to the hunters, we were not in our usual Honda Odyssey mini van but had borrowed our daughter's Toyota Prius which we were sure no hunters had known about. But Charles and Angie got a glimpse of Linda in the front seat (we transmitted out the back of the hatchback for the whole time). He parking his truck and began searching for the microfox.

It was at this time that "Murphy" decided to show up! While listening to the microfox, it suddenly shut off in the middle of a transmission--and then it At the parking lot there is a small pavilion with information about the park located very close to our car. Charles saw that it had a metal roof and was immediately convinced that this would be a perfect spot to hide a fox and he concentrated on sweeping the small structure. Jim and Al however followed their instruments to the leaves behind our car and ended up finding it first. Charles remedied himself by finding the dead battery micro fox and returning it to me!



The final hunt of the year will be the first Sunday of November. New comers are always welcomed and helped along by the more experienced hunters and it is a lot of fun, so please plan on joining us for this fun activity of the Fort Wayne Radio Club!

Here are the current scores for 2023:

FOXHUNTER	OCTOBER	Y-T-D
	SCORE	SCORE
WB9SSE	2	12
WB9RUS	0	7
ΚΑ9ΥΥΙ	0	7
К9ОМА	3	14
КС9МИТ	1	16
ANGIE	1	7
W9SAN	1	14
W9LAN	1	10
ALEX	0	9
HALEY	0	7
W9TSB	0	5
KD9NPL	0	5
KC9GAS	0	4
KD9DPA	0	4

73, Steve, W9SAN



Join the last 2023 foxhunt on Sunday, November 5th. Stay tuned to the Fort Wayne Radio Club website and social media pages for updates.







### **Return of Echolink**

Hello fellow Fort Wayne/Northeast Indiana radio "bugs." As I write this column, the weather has decided to imitate the world's best freezer, and its imitation is quite realistic! However, with such cold weather come many opportunities for sitting in a warm shack, operating some warm radios!

This month's column is particularly geared towards all of you "tablet" users who may have a tablet you use for amateur radio. As most of you probably know, smart-devices like smart phones and tablets have become ubiquitous throughout modernday America. In fact, it's pretty hard to find a place in the US where folks are not using smart devices. From mobile phones to household appliances, smart devices have become a staple of modern life.

Tablets hold a special place in my heart, because I routinely take a Samsung Galaxy A8 tablet to college classes every week throughout the semester. From recording video assignments to looking at the class syllabus, my tablet has proven itself a useful and necessary tool for a variety of collegiate work. However, I do not use my tablet only for college stuff. Indeed, a tablet can be a ham radio op's best friend, with a multitude of apps and programs designed to meet the on-the-go ham's every need.

One app I have recently downloaded unto my tablet is the Echolink app. Echolink has been around for quite a few years, and it basically serves as a common VOIP (voice-over-internet -protocol) program, allowing radio amateurs to communicate with one another via the internet. In an emergency, Echolink is rather limited, since internet access is frequently one of the first items to go down after a major disaster. However, assuming a strong internet connection, Echolink can be a very useful program, allowing radio amateurs to connect to a variety of repeaters and stations across the world. In many ways, Echolink is like the perfect HF transceiver, with global communications at one's fingertips.

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Ready for QSO 🚦 !	* 1: <b>*</b>	
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A screenshot of the author's Echolink app working on his Android tablet

I have personally used Echolink for several years, starting with the common desktop program designed for the Windows operating system, as well as the more recent "Echomac" version of Echolink, tailored for Macbook computers. However, I have not used the Echolink program in several years. This has been a limiting factor, as I have found times where I actually needed or could have used an ability to communicate with a distant repeater that was only available via Echolink.

My lack of Echolink communication ability actually ended the last week of October when I downloaded a version of the Echolink program unto my Android tablet via the Google Play app store. The download process was supremely easy, entailing nothing more than searching for "Echolink" in the Google Play search bar and downloading the program. Once I updated my Echolink password with the main Echolink webpage, I was in business! Echolink is well-known for its security, as only radio amateurs with valid amateur radio licenses are allowed to download and use Echolink. Once I had inputted my callsign, password,

and email address, I was up and running with the Android version of Echolink.

This Android version of Echolink is rather simple, as it does not contain all of the various bells and whistles of the computer-based version. In essence, the app version of Echolink is meant to do one thing and one thing only – connect Echolink users to each other in the most streamlined way possible. On the whole, the Android version of Echolink does accomplish this really quite well, and as I never really used the advanced settings on the computer-version of the program, I don't really miss having fewer features.

The user experience of Echolink for Android was quite enjoyable. I was easily able to connect to the local W9TE repeater on 146.910, with no hiccups or bumps along the way. Coincidentally, my first contact using the Echolink app was the famous HamNews editor, Josh, W9HT! Now how's that for a user experience!

Overall, using Echolink on a tablet was a painless and a near-seamless transition from my computer-based Echolink experiences. Although its been nearly three years since my last Echolink contact, I was easily able to recall what settings I needed and how to navigate my way through the program. Such an easy user experience is really a testament to the common-sense approach and great design by the developers of Echolink. I hope to utilize Echolink much more often now that I have it installed on my portable smart device.

73 de Jim AC9EZ

## The Ipad and Ham Radio

I must admit that I depend a lot on my Ipad. With a bigger screen (for my old eyes!) than my smart phone, I do most of my online activity with it, especially my emails. I've had *worms* and *viruses* using email on my personal PC, even with virus protectors, yet, since I have been using the Ipad for emails (12+ years now), I have had no security issues! The same with online purchases as I find the security of the Ipad outstanding. Besides the day to day online/email business, (and, of course, free games to play) ham radio is a major Ipad use! Here are some uses.



**Reading online Ham Radio Publications**. For those who are members of the ARRL, the monthly QST magazine is automatically available for reading online. Along with QST, you can also read *On the Air, QEX,* and *National Contest Journal*. I like the fact that you can read back issues and easily enlarge the small type for easy reading. Even though you get a hard copy of QST, you can also request a digital only subscription knowing that if you need to look at past issues, its an easy task with ARRL's online access. Reading at night in bed requires no external lighting.

952 AM, Fri Del 27	***	🕈 🗢 93% 📷
2.1 Miles South FM Fusion W9TE / Fort Wayne, New Haven 146.94000 -0.6 MHz 141.3 Hz		
4.2 Miles West FM W9INX / Fort Wayne, Parkview Hos 147.25500 +0.6 MHz	pital Randallia	
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5.4 Miles West FM Echolink W9TE / Fort Wayne, IPFW Campus 146.91000 -0.6 MHz 141.3 Hz		
5.4 Miles West FM W9AVW / Fort Wayne 444.25000 +5.0 MHz 141.3 Hz		
5.4 Miles West FM IRLP W9FEZ / Fort Wayne 444.80000 +5.0 MHz 141.3 Hz		
5.4 Miles West FM W9TE / Fort Wayne 444.87500 +5.0 MHz 141.3 Hz		
5.6 Miles North West FM W9TE / Fort Wayne 146.76000 -0.6 MHz 141.3 Hz		

**Repeater Directory and Echolink** is another nice usage of Ipad's APPs. The repeater directory uses your location to find the local repeaters with necessary access information. Using the Echolink app alows me to connect to the club's 146.91 repeater when I'm spending winter in Florida or when traveling.

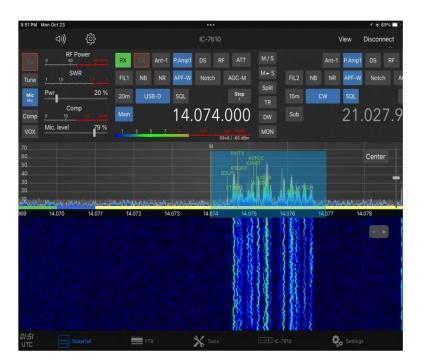


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POTA I-1306 J	N65OV QRP		
			DX de WD6BNY
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DX Watch – DX Spotting Network For those looking for DX stations or POTA stations or FT4/8 contacts, the DX Cluster network is a must. It constantly is updating and shows the DX call and frequency. A great tool if you enjoy looking for new countries to contact and with the rise of the sunspots and emerging propagation cycle, the spots on 10 and 15 meters are plentiful. I can look at this in my easy chair in the living room and if I spot a DX station that I need or want to work, I simply head out to the shack and make the contact. The nice thing is that these apps are free although, like the one on the left, frequent ads appear!



**Remote Control of my Electrical Outlets** This is my KASA app and it requires remote adapters that connect to my home wifi. Along with the adapters is a camera which is located in the shack. I can visually monitor my shack and thermometer and remotely turn on the electric heaters. (The only heat source) I can also turn on my radios via powering up my power supply. With this, I can now use this next App:



**SDR Control for Icom by DL8MRE** Having made a change from the K3 by Elecraft to the IC-7610 by Icom has given me the ability to remotely access my radio. This \$50 app is pretty cool and allows for full access to my radio and it functions from within my own wifi and through the internet ANYWHERE! The screen on the left shows the FT8 function and it does exactly what my computer and radio does in the shack. The waterfall even shows the stations although the FT8 page shows the same info as the WSJT program. I can operate SSB using the Ipad internal microphone . . . recently I was in Michigan, accessed my station here and worked a station in France and another in Bulgaria, CW is by keyboard only so no SKCC activity! The next two pics show the logbook and other functions.

9:52 PM Mon Oct 23						9:52 PM Mon Oct 23			•••			÷ 69% ■
		Тс	xols			< Tools			Logbook - (iCloud)			Settings
hunder of				à		9 Logbook entrie(s)						Мар
harring and						2023-10-21 12:15:29	N4EXA	14.075166	20M FT8		RST sent: -01	Rcvd: -04
				IT CONTRACT	$\sim$	2023-10-21 12:13:59	PA3BMB	14.075166	20M FT8		RST sent: -07	Rcvd: -08
Band Plan	CW Macros	CW Keyer	DX-Cluster	POTA	PSK-Reporter	2023-10-21 12:12:29	PD7RF	14.076492	20M FT8		RST sent: +09	Rcvd: -10
						2023-10-21 12:09:35	SP2EWQ	14.076492	20M FT8		RST sent: -02	Rcvd: -07
						2023-10-21 12:07:59	EA9TF	14.076491	20M FT8		RST sent: -12	Rcvd: -08
					:=	2023-10-18 11:59:35	LZ3ND	28.394865	10M USB		RST sent: 59	Rcvd: 59
			L		VFO	2023-10-17 22:45:29	DL8MRE	14.076624	20M FT8		RST sent: -18	Rcvd: -15
MIDI Controller	Pryme Buttons	Logbook	Network Stats	Call lookup	Memories	2023-10-12 22:12:14	V31MA	28.076338	10M FT8		RST sent: +04	Rcvd: +03
						2023-10-12 15:10:01	DL5NJ	28.031100	10M CW		RST sent: 599	Rcvd: 599
Scanning												
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The app also connects to the internet and provides DX Cluster info, POTA activations, QRZ call lookup, a CW keyer, and a log book that produces an .adi file which can be used to import into your HRD (or similar) logbook and import to Logbook of the World. So far, I'm impressed and am having fun with this app. It is just another use for my Ipad! 73 de Ken - N8KR

# Adios Symbol Rate Limit

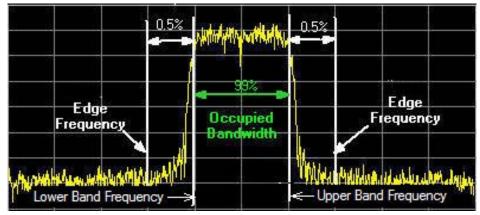
The FCC will be voting on and will likely approve a Report and Order that eliminates the symbol rate restriction on HF data transmissions, replacing it with a bandwidth limit of 2.8 kHz. See FCC To Vote on Removing Symbol Rate Restrictions. The symbol rate limit of 300-baud is an obsolete way of limiting the signal bandwidth, created back when the data transmissions were predominately Frequency Shift Keving (FSK). It was a simple, practical way to regulate the bandwidth at that time but technology has moved on. The use of digital signal processing and efficient wireless encoding techniques require a better approach to bandwidth regulation.

A practical impact of this change is to allow higher speed protocols such as <u>PACTOR-4</u> having a bandwidth of 2.4 kHz. I suspect we will see other protocols emerge that squeeze the best data rate out of the 2.8 kHz bandwidth.

### Living in a Narrowband World

The FCC proposal implements a 2.8 kHz bandwidth limit on data emissions on the HF bands. Some folks have suggested a narrower bandwidth while others argue that wider bandwidth signals should be allowed. And some even think we should have no bandwidth limit at all.

The problem is that the amateur HF bands are not very wide. For example, the popular 20m band is 14.0 to 14.350 MHz, providing only 350 kHz of spectrum. Common practice on this and the other HF bands is to use modulation types that have bandwidths of 3 kHz or less. (Yeah, AM signals are twice that wide, at 6 KHz, a topic for another day.) Of course, CW and some of the data modes are much narrower than 3 kHz. But the general approach to regulating HF is to allow many narrowband signals on the band. Limiting HF data transmissions to 2.8 kHz bandwidth is consistent with existing practice while still allowing for innovation and experimentation.



### VHF/UHF Bandwidth Limits

The FCC also plans to issue a Further Notice of Proposed Rulemaking (FNPR) that:

Proposes to remove the baud rate limitation in the 2200 meter and 630 meter bands, which the Commission allocated for amateur radio use after it released the Notice of Proposed Rulemaking in 2016.

Proposes to remove the baud rate limitation in the VHF and UHF bands.

Seeks comment on the appropriate bandwidth limitation for the 2200 meter band, the 630 meter band, and the VHF/UHF bands.

I won't comment on the 2200 meter and 630 meter bands. The FCC proposes to remove the symbol rate limit on the VHF and UHF bands and asks what bandwidth limit is appropriate. The current bandwidth limits are 20 kHz for the 6m and 2m bands, 100 kHz for the 1.25m and 70 cm bands, and the FCC seems fine leaving these the same. Authorized emission types are listed in FCC Part 97.305.

With 4 MHz of spectrum, the 2m band is much wider than any of the HF bands. It might be tempting to conclude that there is plenty of room for wideband signals on this band. Many hams think 2 meters is just used for FM simplex and repeaters but a closer look reveals that it supports many diverse modes: weak-signal SSB/CW, meteor scatter, EME, FM simplex, FM repeaters, digital voice modes (D-STAR, DMR, Fusion), satellites, and more. The 20-kHz limit seems appropriate, as it roughly matches the bandwidth of the most common (FM) voice signals on that band. It is not an appropriate band for trying out wider bandwidth signals.

The 6m band should probably keep the same 20-kHz limit. (I don't think there is a compelling reason to change it.) The 1.25m band already allows 100-kHz bandwidth data signals, which some radio amateurs have used for higher-speed data links (still not what I would call wideband).

The 70 cm band is much bigger (420 MHz to 450 MHz) and could accommodate some wider bandwidth signals. Perhaps the existing 100-kHz limit should be increased? Keep in mind that fast-scan ATV is allowed on this band with a bandwidth of 6 MHz. Maybe we can make some room for a few larger bandwidth data channels, to encourage innovation and experimentation.

The bands above 70 cm have no bandwidth limit other than the signal must stay within the designated ham band. It has been this way for a long time, without causing any issues (that I know of).

#### Conclusion

The FCC's proposal makes a lot of sense and it is long overdue. Frankly, it is a bit of an embarrassment that it has taken so long.

Better late than never.

73 Bob K0NR



## October 2023

New members: WC0Y

Awards: W9SA – Prefix Award, P x 10

Operating Activities during the month follow.

For the Weekend Sprintathon (WES) on October 14-15, the following local operators participated. QSO count is shown.

N8KR 334	KA9GKE 54
N9SE 140	KA9ERV 39
NE9EE 100	W9SA 33
AC9XS 91	W9GOO 32
WA9BBN 85	WG9K 27
KC9UR 70	W9HT 25
WB9EAO 58	K9FMX 10

For the Two Hour Straight Key Sprint (SKS) on Tuesday evening, October 24, 8-10 PM local, the following local operators participated. QSO count is shown.

N8KR 66	W9GOO 15
NE9EE 64	AC9XS 12
W9HT 37	KA9ERV 10
NJ0U 36	KA9GKE 7
WA9BBN 18	

73,

Ed, WA9BBN



IN OCTOBER AND NOVEMBER THERE IS A TRAINING CLASS FOR THE EXTRA CLASS LICENSE. IT WILL BE HELD AT THE COMFORT SUITE AT 1137 W 15 ST. IN AUBURN, IN FROM 6:30 PM UNTIL 8:30 PM. THE CLASSES ARE ON TUESDAYS AND THURSDAYS DURING OCTOBER AND NOVEMBER STARTING OCTOBER 10TH. THERE IS NO FEE. WE WILL USE THE GORDON WEST BOOK FOR THE CLASS. FOR MORE INFORMATION, CONTACT JEFF DELUCENAY, KB9QG AT DELUCE (AT) FRONTIER.COM



This section of the Allen County HamNews is available for local hams to list any ham radio related gear for sale or to place any ham radio related want ads.

Listings are posted for one month, but can be renewed upon request of the editor.

Please see page two for contact information. 8 HP 4KW generator. Coleman repeaters. Powermate 54 series.

Occasionally misses while running. Likely needs points and Capacitor. Mounded on a hand truck for portability. A good field day generator. \$25.00

Contact Jim, KR9U at jbwolf (at) comcast.or call 260-637-6434

43 foot vertical, self support, no guys needed or wanted. Wind rating 92 MPH. Tilt base. 2kw rating.

\$150

Contact AI K9FW on 146.91 repeater.

Old style CW iambic paddles. Nice condition.

\$40

Contact AI K9FW on 146.91 repeater.



ICOM ID-31A D-STAR/FM UHF handheld transceiver. UHF only. Up to 5 watts output. Built in

GPS receiver. Programmed for Fort Wayne's D-STAR repeater and all Fort Wayne UHF FM



Includes drop-in charger, new in box OPC-2350LU programming cable (\$57 value), LC-178 case (\$10 value), two BP-271 1150 milliampere-hour battery packs, and a 32-megabyte SD card. Was working great when I replaced it with an ID-51A plus. \$275.



Contact Jay Farlow, W9LW, w9lw (at) arrl.net.

FREE - E.F.Johnson Ranger transmitter. Needs new electrolytic capacitors.

Call 260-447-1225, ask for Jim.

Area Nets (updated as of 11/1/23)						
Daily			Tuesday			
8:00 AM	3.535	Daily (QIN) Indiana Section CW net	7:30 PM	147.150+	21 Repeater Group Net (97.4 PL)	
8:30 AM	3.912	Daily Indiana Traf- fic Net	8:00 PM	50.580 USB	FWRC 6-Meter SSB Net	
6:00 PM	3.910	Daily Indiana Traf- fic Net	9:00 PM	146.940-	Allen Co. ARES Training Net (141.3 PL)	
6:30 PM	146.880-	IMO (alternate is 146.940)	Wednesday			
7:00 PM	147.015+	Tri State Two Me- ter Net		-	-	
8:00 PM	3.535	Daily (QIN) Indiana Section CW net	8:00 PM	145.270-	Whitley Co. ARES (141.3 PL)	
Week- days			8:00 PM	50.580 FM	FWRC 6-Meter FM Net	
9:00 AM	3.820	Little Red Barn Net	—	—	-	
Sunday			Thursday			
8:00 PM	444.550+	Whitley Co. ARC Sunday Night Net (141.3 PL)	8:00 PM	D-STAR	Indiana D-STAR net (Note 3)	
8:30 PM	146.910-	"No-Name" Net also on EchoLink Node number 519521	8:00 PM	50.580	AM 6-Meter AM Net	
9:00 PM	145.53 simplex	Northeast Indiana Packet Net 1200 baud (Note 2)	8:30 PM	145.510 simplex	Allen County ARES Digital Operations Team Training Net (Note 4)	
Monday			Saturday			
8:00 PM	224.780-	Fort Wayne 224 Net	8:00 PM	146.685-	Huntington ARES(141.3 PL)	
2. NEIPN is other areas KA9LCF-11 3. Reflector	direct accessi through other , KC9VYU-11, REF024B.	ble via any BPQ Chat No nodes (it is locally direct a N9LCF-11,N9PXO-11, k	de (or through Ne accessible on 14 9BIF-11) Most B	ode hopping etc 5.53 in NC & NE PQ Nodes use	newsletter editor at drjoshlong (at) gmail.com. b.) via other packet frequencies in this area and E Indiana/NW Ohio and SE Michigan using an SSID of -11. etc. NBEMS suite of software (FLDIGI, FLMSG,	

and FLAMP) is preferred. 5. Indiana HF Traffic Nets Web Site: http://www.inarrl.org/index.php/public-service/indiana-nts

	Area Repeaters (updated as of 11/1/23)							
Frequency	Offset	Tone/ Notes	Callsign	Frequency	Offset	Tone/Notes	Callsign	
				442.6375	+5 MHz	MDR CC1	N9MTF	
145.330	-0.6 MHz	141.3	W9FEZ	442.99375	+5 MHz	D-Star W9TE- B	W9TE	
146.880	-0.6 MHz		W9INX	443.100	+5 MHz	DMR CC1	K9MMQ	
147.255	+0.6 MHz		W9INX	443.275	+5 MHz	P25 NAC # 293	K9MMQ	
146.760	-0.6 MHz	141.3	W9TE	444.250	+5 MHz	141.3	W9AVW	
146.910	-0.6 MHz		W9TE	444.800	+5 MHz		W9FEZ	
146.940	-0.6 MHz	141.3 FM /	W9TE	444.8750	+5 MHz	141.3	W9TE	
224.780	-1.6 MHz		W9FEZ					

	FWRC Membership Application
Name:	_ Call Sign:
License Class:	_ our orgin
Street address:	City:
State:ZIP:	Phone #:()
Email address:	
(ARRL membership helps the club maintain AR	RL affiliation)
,	our membership roster & on our club web site? Yes or No
May we list your hame, can a email address in t	
Fort Wayne Radio Club dues:	
Regular membership	\$25.00 / year
Family membership <sup>1</sup>	\$35.00 / year
Student membership <sup>2</sup>	\$5.00 / year
Associate membership <sup>3</sup>	\$20.00 / year
(Memberships for July-December are $\frac{1}{2}$ the sta	-
(Memberships for July-December are /2 the sta	led amounts)
Please attach a check to this form (paying by ch	
Fort Wayne Radio Club (check number	) and bring to a club meeting or mail to:
Fort Wayne Radio Club	
P.O. Box 15127	
Fort Wayne, IN 46885-5127	
1: Please list all names and calls on an atta	ached sheet.
2: K-12 or full time student.	
3: Unlicensed member.	
	ACARTS Membership Application
Name:	_ Call Sign:
License Class:	
Street address:	City:
State: ZIP:	Phone #:()
Email address:	ARRL Member?
(ARRL membership helps the club maintain AR	
,	our membership roster & on our club web site? Yes or No
ACARTS dues:	
Regular membership	\$12.00 / year
Additional family members <sup>1</sup>	\$6.00 / year
Student membership <sup>2</sup>	\$6.00 / year
Associate membership <sup>3</sup>	\$6.00 / year
(New regular memberships are \$1.00/month)	ψ0.007 year
Please attach a check to this form (paying by ch	
	(check number) and bring to a club meeting or mail to:
A.C.A.R.T.S.	
P.O. Box 10342	
Fort Wayne, IN	
1: Please list all names and calls on an atta	ached sheet.
2: K-12 or full time student.	
3: Unlicensed member.	