

Allen County HamNews

Fort Wayne Radio Club Fort Wayne DX Association

Allen County Amateur Radio Technical Society

April 2021

Volume 22

Issue 4

COMING TO THE AIRWAVES
SOON!

3 FUN CONTESTS!



Check out the articles in this
edition of HamNews for more
information!



FM VHF/UHF SIMPLEX

SSB/CW 2M SPRINT

INDIANA QSO PARTY

MAKE CONTACTS! HAVE FUN!
WIN AWARDS!

In this edition:

From the Editor

Page 2

SkyWarn News

Page 3

FWRC News

Page 4

IN QSO Party

Pages 7-10

FM Simplex

Contest

Page 11

ACARTS Presi- dent's Column

Page 12

DXing with the 10.7cm Solar Flux

Pages 13-14

SSB/CW 2M Sprint

Page 15

Foxhunt

Chronicles

Pages 16-17

For Sale/Wanted

Pages 18-20



Allen County HamNews

HamNews is a monthly 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 each of the three clubs. New submissions for HamNews are always welcome. Please submit your information to the editor within two days of the end of the month for inclusion in the next edition.

For any questions, please contact the newsletter editor.

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

From the Editor

As the cover for this edition of HamNews indicates, the next month or so will offer several opportunities for local contests. Check out the information in this edition for more details.

Last month I was testing out an Xiegu G90 HF transceiver. I decided that it would not meet my operating requirements, but it did prove to be an interesting SDR experience.

What radio projects do you have planned for this spring and summer? Consider writing a short article about that or another topic for the next edition of HamNews!

I'll catch you on the airwaves during one of the contests.

73,

Josh, W9HT

drjoshlong (at) gmail.com

Skywarn® Net Runs Successful Test During Tornado Drill

By Jay Farlow, W9LW, Allen County Skywarn Net Manager

Nearly 20 stations exercised their severe-weather readiness during a Skywarn net in conjunction with the Indiana statewide tornado drill March 16. Chad Beach, W9GGA, opened the net in standby mode at 10:05 a.m. Until the National Weather Service (NWS) issued a test tornado warning at 10:18 a.m., Chad took check-ins and reminded operators of Skywarn net procedures. Jim Moehring, KB9WWM, communicated with stations on a statewide DMR talk group (more on DMR below).

Seven stations practiced net procedure by sending simulated severe weather reports. Jay Farlow, W9LW, received those reports and entered them into a special NWS internet chat room, where participating NWS staff members and emergency managers saw them.

Howard Pletcher, N9ADS activated a ham station at the Allen County Office of Homeland Security, where staff members heard firsthand how amateur radio reports can assist with situational awareness. In an email, Homeland Security Director Bernie Beier referred to the Allen County Skywarn network as “a powerful partner for our community preparedness effort.”

In addition to the stations mentioned above, the following participated: AC9XS, K9JDF, K9SKS, KA9IPA, KB9JR, KB9QVH, KC9RCX, KC9SJP, KD9NYZ, KD9QHI, N9JFN, N9SFX, N9UKE, W9KMH and WX9IWX.

Operators who were unable to participate and who wish to refresh their memories on Skywarn net procedures may [download the net operations manual](#) from the FWRC website.



Statewide DMR Talk Group Dedicated to Weather Operations

A special amateur digital mobile radio (DMR) talk group (virtual channel) is dedicated to exchanging weather information throughout Indiana. Hosted on the Brandmeister DMR network, the Indiana Weather Operations talk group, number 31183, is available on many Indiana DMR repeaters and any personal, DMR hotspots that connect to the Brandmeister network.

In Fort Wayne, the N9MTF DMR repeater, located on the roof of Parkview Randallia Hospital,

carries talk group 31183 full time on time slot 1. The repeater transmits on 442.6375 MHz and uses color code 1. The weather talk group is not available on Fort Wayne’s other DMR repeater (K9MMQ, 443.100 MHz).

On many Indiana repeaters, and probably many personal hotspots, talk group 31183 is configured as dynamic, which means the repeater will not transmit any of the talk group’s traffic until a local user transmits on the channel to activate it on that repeater. This means that calls made on the talk group are not automatically heard on every repeater in the state.

Another challenge is that none of the ham radio stations at NWS offices that serve Indiana are yet equipped with DMR radios. This means that if a station makes a report on the DMR channel, NWS won’t know about it unless another station relays the report, via the NWS internet chat room or other means.

Nonetheless, it’s a good idea for DMR-equipped Skywarn storm spotters to access talk group 31183 during severe weather events, if only to chat with each other about what they’ve reported via other channels. Though continued use, the channel could become increasingly useful for situational awareness.

Amateurs interested in learning more about DMR or the Indiana Weather Operations talk group may contact Jay Farlow, W9LW, arsw9lw@gmail.com.

Hamsplatter

Fort Wayne Radio Club

P.O. Box 15127, Fort Wayne, IN

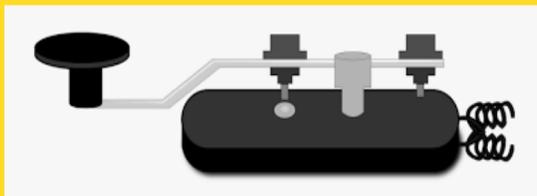
UPCOMING FWRC MEETING PRESENTATION TOPICS

April - Mr. Jeff Bauermeister, a Raytheon retiree, will provide a presentation on racing carrier pigeons.

May - Sgt. Sophia Rosales-Scatena of the Fort Wayne Police Dept, Public Information Unit will brief us on general safety topics including situation awareness and answer any related questions.

June - The presentation will revolve around preparations for Field Day.

July - Railroad Telegraphy



FWRC Officers 2021

President

Carole Burke, WB9RUS
(260) 637-1989
Wb9rus(at)comcast.net

Vice President

Paul Prestia, KA3OPZ
(260) 485-9632
Phixer(at)gmail.com

Secretary

Al Burke, WB9SSE
(260) 637-1989
Aburke55(at)comcast.net

Treasurer

Bob Streeter, W8ST

Communications Manager

Charles Ward, KC9MUT
(260) 749-4824
Kc9mut(at)yahoo.com

Directors

Steve Nardin, W9SAN
(260) 482-4039
W9san(at)arrl.net

Clarke Derbyshire, KG9FM
(260) 485-6255
Cderbyshire(at)
comcast.net

Bill Hopkins, K9WEH

Stuart Hall, KD9LFW

Newsletter Editor

Josh Long, W9HT

FORT WAYNE RADIO CLUB MEETING MINUTES

17 March 2021

The March edition of the Ft. Wayne Radio Club meeting was held at the Allen County Public Library (downtown) on 17 March, 2021. We made use of meeting rooms A & B which provide room for up to 126 people in a Corona virus compliant environment. (We have also reserved the venue for the April and May meetings and have programs lined up already for those two meetings and beyond. For the time being meetings will start promptly at 6:00 pm because the library closing time has been changed to 8:00 pm.

Club President Carole Burke, WB9RUS welcomed the attendees (about 22) where-in all introduced themselves by their name and call-sign, including several newly minted hams and also including a contingent from the Trine University Amateur Radio Club!. Following introductions we executed the pledge of allegiance ceremony according to our usual practices.

Treasurer Bob Streeter, W8ST provided the current club banking account balances as of 17 March, 2021, to wit:

Savings-	\$1,831.57
Checking-	\$5,834.24
Vanguard Money Market-	\$11,325.25

Membership count-128 members

Al Burke, WB9SSE reported on repeater status. All machines are operating normally. However the 146.76 MHz and the 444.875 MHz machines both went down about two weeks ago. Upon inspection Steve Nardin, W9SAN, discovered that the Uninterruptible Power Supply (UPS) had failed, so he bypassed it and both machines are operating directly from the mains. Al Burke later inspected the UPS and determined that two of the four

12 volt sealed lead-acid batteries had died.

The photo included shows significant corrosion on two of the batteries and they both measured an abnormally low charge. If we replace them we should replace all four batteries. We can purchase replacement batteries for just under \$150.00. The Repeater Maintenance Committee is going to decide if it makes sense to replace the batteries and keep the UPS in the system at Robison Park, or just forgo it.

Carole announced that she had designated Steve Nardin as the single point of contact within the club to handle disposal of equipment the club has accumulated, either through donation or in our role of helping dispose of ham equipment from area hams estate's when he/she passes. So anyone wishing to donate equipment to the club, or desires the club to help liquidate amateur equipment items from an estate, or is interested in purchasing something from the club's inventory of items need get in touch with Steve (w9san@yahoo.net, (260) 482-4039).

Steve Nardin reported on the March foxhunt. It was held on Sunday 7, March. There were five foxhunt teams including two from Trine University, and a team who

came up from Indianapolis. Steve, his wife Linda (W9LAN) and their grandson Alex served as the fox and they hid out near the Soapbox Racing Hill in Franke Park. Charles Ward (KC9MUT) and his newbie ride-along foxhunter Brian Sears (KD9QHL) were first to find the fox so they are in line to serve as the fox in April. See the Foxhunt Chronicles for more details regarding this month's competition.

Carole announced that since the Coronavirus situation greatly impacted the plans for celebrating the club's 100th year in 2020, we are going to try to celebrate in 2021. She has been in discussions with Tin Caps President Mike Nutter about setting up a station at the ball park during a game and operating. We can have the Mayor release a proclamation recognizing our 101th year and release it during Field Day. Speaking of Field Day, it looks like we will be operating from the Old Fort again this year and hopefully the Coronavirus situation will allow the public to enter the Old Fort during that weekend. She has asked Clarke Derbyshire (KG9FM) to consider regurgitating his "100 Contacts", (perhaps as the 101 Contacts) competition this year. And then there is this year's Indiana QSO Party. Fort Wayne had a crushing win last year, so let's do it again this year. Let's go for one million points!



Carole was pleased to announce that the Little Red Barn Luncheon meetings are starting back up. The first meeting in 2021 will occur on 18 March at the Big Eyed Fish on Wells Ave. Follow-on luncheons will occur every two weeks thereafter.

Bob Streeter observed that club member Carl Luetzelschwab, (K9LA) has a featured article published in the April QST entitled "Solar Cycle 25 is finally here". It is pointed out as recommended reading for both old and new hams alike.

Carole announced that the program/presentation scheduled for the next few months include:

April - Mr. Jeff Bauermeister (a Raytheon retiree) will provide a presentation on racing carrier pigeons. He and his father were into this hobby which is quite fascinating. And of course this form of communication (carrier pigeons) predates radio communications.

May - Sgt Sophia Rosales-Scatena of the Fort Wayne Police Dept, Public Information Unit who will brief us on general safety topics including situation awareness and answer any questions we may have on the subject. We may also be able to give us her view on the hoopla that took place in Washington D.C just after the Presidential inauguration. Carole has attended a presentation by her at another venue and found her quite interesting and informative.

June - The presentation will revolve around preparations for Field Day.

July - Larry Temenoff (KB9OS) ran across a former railroad telegrapher, Larry Lett, who used to work for the Wabash Rail-

road, Montpelier Division. Larry has working examples of collector item keys and has agreed to bring them to the July meeting and provide us a program on old time telegraphy. This is the technology that preceded Morse code and radio telegraphy.

Following the business meeting Carole introduced Carlos Felix (KB9OLN) who provided a fascinating presentation on how he operates two meter mobile, by communicating with folks after he has skydived from an airplane, conducting QSO,s (on the order of 200-300 miles distance) as he descends to Earth.

The meeting concluded about 7:30 pm.

Respectfully submitted,

Al Burke, WB9SSE

Secretary, Fort Wayne Radio Club

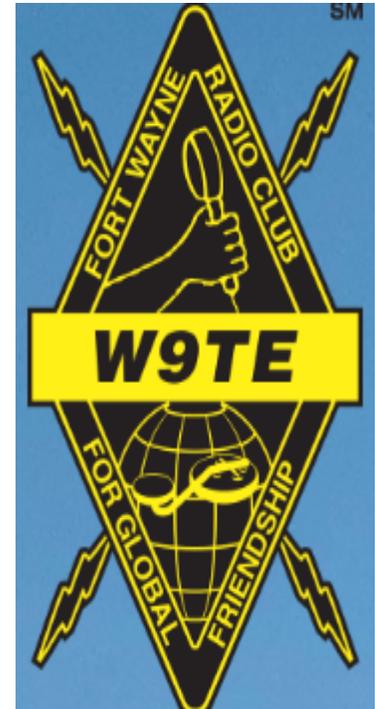


Image: Carlos, KB9OLN

THE FORT WAYNE RADIO CLUB INVITES
YOU TO PARTICIPATE IN THE

2021 INDIANA QSO PARTY

Help the FWRC to set a new
record and to win the club
category again for 2021!



SEE THE ARTICLES BY N8KR AND AC9EZ



CQ INQP CQ INQP

Sponsored by **HDXCC** *the* Hoosier DX and Contest Club

2021 Indiana QSO Party
Fort Wayne Radio Club Involvement
Defending our Honor
 Saturday, May 1, 2020 11am to 11pm (local time)

Once again, it's time to make our club **stand out!** The club competition for Indiana QSO Party relies on aggregate scores submitted by individual club members! That means all we need to do is get on the air from our home stations, makes some contacts on HF (SSB or CW or BOTH!), and submit our logs as members of the Fort Wayne Radio Club.

During the 12 hour event, stations from all over Indiana will be calling, "CQ Indiana QSO Party." Simply contact them, log their information (signal report and county . . . or, if out of state, signal report and state) and give out a signal report (everyone sends 59 for SSB or 599 for CW) and your county.

Logging of contacts **can** be made by using special logging software like WriteLog, N3FJP, or N1MM. The INQP webpage (www.hdxcc.org > Indiana QSO Party) also suggests several others but these are the ones that work the best! Both WriteLog and N3FJP are for purchase. The N1MM Logger+ is totally free and supports all contests and state QSO parties without having to download extra files. Like N3FJP and WriteLog, it can interface with your radio, connect to PacketCluster via telnet, interface and log FT-8, PSK, RTTY, along with producing files for uploading to LoTW and whatever computer logbook you operate! You can also have it submit your score!

Logging of contacts **can** also be done manually on paper. I've designed a special log sheet for the FWRC along with a summary sheet that will be sent out at the next INQP email to the membership. This will make it super easy for you to casually add to the **Fort Wayne Radio Club** participation. Several of our club members used these log sheets last year!

This is our 101st year as a club! We ARE an active club! Last year we set a new Indiana Club record, winning the Club Competition Category with 28 entries from our club – YES! 28 club members submitted logs accumulating a huge score of 753,438 points with nearly 5,000 contacts! Look at these scores from last year:

Jack – W9GT	787 qso's	190,124 score	Jim- AC9EZ	501 qso's	112,267 score
Jay- W9LW	335	55,341	Josh- W9HT	446	50,803
Dan- K9EA	260	29,288	Jim- KD9GDY	219	26,840
Tom- KU8T	208	26,460	Ed- WA9BBN	184	18,212
Don- K9LI	165	16,632	Al- K9FW	120	8,400
Bill- W9SA	94	3,666	Steve- W9SAN	81	3,293
Norm- KD9HAV	75	2,700	Terry- K9FMX	59	2,600
John- W9WN	44	2,376	Joe- KJ9R	106	5,618
Ritchie- N9RIS	66	2,310	Richard- N9HRA	55	1,650
Dennis- KD9KMK	43	1,333	FWRC- W9TE	36	700
Mike- KB9OZI	26	494	Chad- KD9INP	30	420
Larry- KB9OS	25	373	Rose- KA9GKE	21	210
James- KR9U	16	208	Bill- K3HZP	5	40
Carla- KD9ITZ	3	3	Ken- N8KR	898	190,809

It is time to start planning! To help answer questions and further discuss our participation, a **special 2 meter net will be held on Monday April 19th at 7pm on the 146.91 repeater**. We will have one additional net just prior INQP.

If you have interest in downloading and using (FREE) N1MM Logger+ (Windows 7,8,10) here is the link and basic directions:

www.N1MMwp.hamdocs.com

1. Downloads
2. Program Files
3. Full Install
4. Two step process:
 - A. Download and run Full Install (Base Install)
 - B. Download and run Latest Update File
5. Start the program run N1MM+

Questions? Contact me on the repeater or N8KR@ARRL.net

73,

Ken – N8KR on behalf of The INQP Planning Committee for the FWRC

The 1,000,000 Point Challenge

Jim, AC9EZ

The INQP or Indiana QSO Party is an amateur radio contest held once a year by the Hoosier DX and Contest Club. Occurring on the first Saturday of May, the INQP is like many typical contests - make as many points as possible in a specific period of time. Like other state qso parties, the INQP has multiple categories in which stations may enter (High Power, Low Power, QRP, Rover, Mobile, etc.), with Indiana stations competing against other Indiana stations, and out-of-state stations competing against other out-of-state stations.

One competition, though, stands out as the “Holy Grail” of the entire contest - the Club Competition. The Club Competition allows individual clubs within Indiana to compete against one another. For the Club Competition, the goal is for as many members of a particular club to earn as many points as possible, with all of their scores combined into one aggregate Club score.

In 2020, the FWRC (Fort Wayne Radio Club) won the Club Competition with a tremendous score of 737,223 points. With the efforts of over

20 FWRC members, that six-digit score is the all-time record high score in the Club Competition - no small accomplishment considering that the Club Competition has been in existence since 2007.

However, not all is smooth sailing. After the record-setting victory by the FWRC, chances are quite good that other Indiana clubs, particularly the FWRC’s arch-INQP rival, the Lafayette DX Association (LDXA), are thinking about what they can do to take back the top-spot in the Club Competition, and possibly set a new record. That next record, is quite possibly a million points. Whichever club achieves that magical seven-figure Club Competition score will be long remembered in the histories of the INQP.

There is an obvious question that must be asked: Is a million points possible? I believe the answer is yes, but that is a very cautious yes. Remember that there are several clubs who are all in the hunt for the elusive Club Competition plaque. Nine different clubs have placed either First or Second in the Club Competition in the last 14 years, and they all have good chances of winning.

I have created a summary table demonstrating how much competition there exists for that first place Club Competition plaque (see the next page) In Table 1, we see the names, years and scores of the clubs who have won first place in the Club Competition, from 2007 till 2020. Notice that only two clubs since 2007 have ever won the Club Competition more than once - the FWRC with three victories, and the LDXA with five.



Table 1: INQP Club Competition First Place

Club Name	Year	Score
Fort Wayne Radio Club	2012	350,268
	2017	167,401
	2020	737,223
Lafayette DX Association	2008	259,191
	2009	470,832
	2010	349,780
	2015	444,054
	2019	365,155
Goshen ARC	2007	72,617
Kokomo Amateur Radio Club	2011	305,148
Madison County ARC	2013	294,849
Purdue Amateur Radio Club (W9YB)	2014	608,549
<u>Dillman's</u> Amateur Radio Experimenters	2016	175,369
Northwest Indiana DX Club	2018	421,259

As can be seen from Table 1, several clubs have put up rather impressive Club Competition scores, with five 300,000+ point scores (and one near-300,000 score). If we were to look at the Second-place finishes by Indiana clubs, we would see that the LDXA alone has four, Second-place finishes compared to only three Second-place finishes by the FWRC. Even more interesting, both the Kokomo ARC and the Eli Lilly ARC have also earned three Second-place finishes.

One final thought about the Club Competition: Only once has the defending champion of the Club Competition ever won a consecutive victory, and that was by the LDXA in 2008, 2009, and 2010. Not even the FWRC has won a consecutive Club Competition First Place.

So here's the challenge, FWRC: To break 1,000,000 points; to defend the FWRC title in 2021; and to give the other clubs of Indiana a run for the money that they'll never forget!



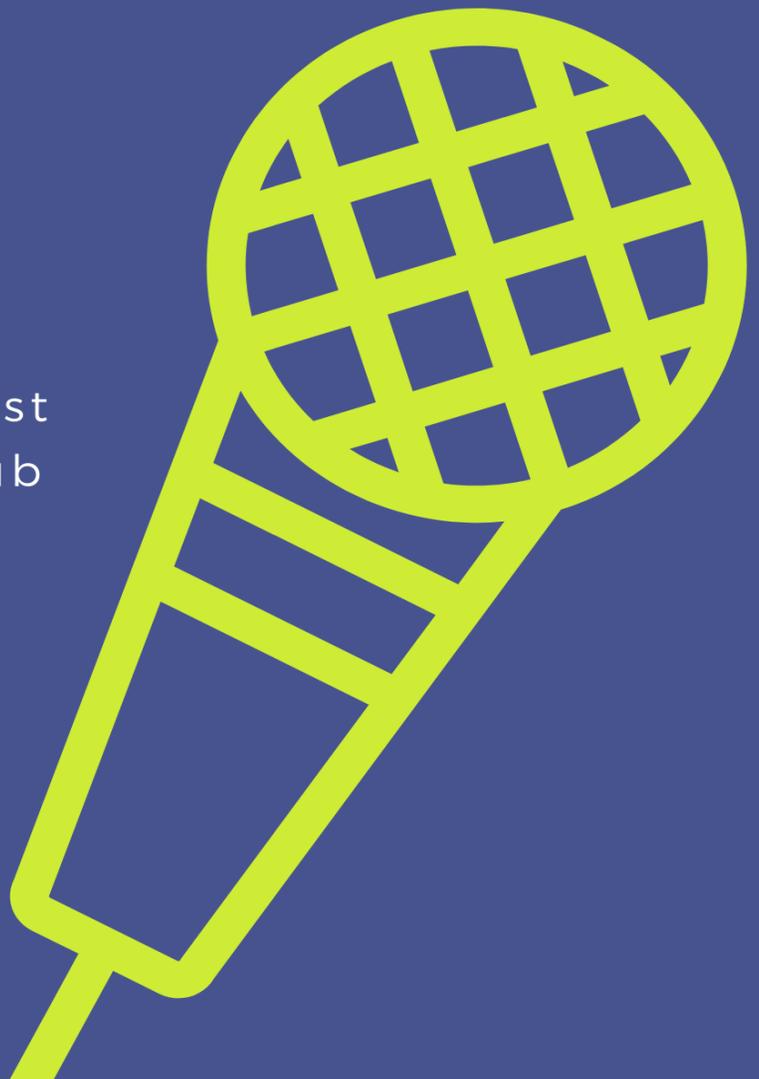
Let's go FWRC!!!

THE ALLEN COUNTY AMATEUR RADIO
TECHNICAL SOCIETY PROUDLY PRESENTS THE

2021 FM VHF /UHF SIMPLEX CONTEST

Saturday, April 10th,
7:00PM - 10:00PM EDT

For complete contest
rules, check the club
site at
www.acarts.com

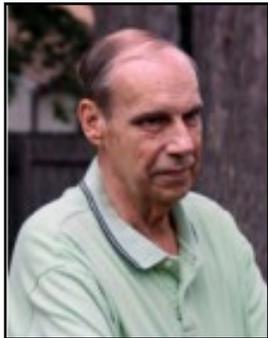


State of the Arts

Allen County Amateur Radio Technical Society

P.O. Box 10342, Fort Wayne, IN

ACARTS President's Message for April 2021



The ACARTS Northeast Indiana FM VHF/UHF Simplex contest is almost here. It will be held on Saturday, April 10th, from 7:00 p.m. to 10:00 p.m.

EDT. The weather is improving, so now is the time to decide which category to enter and to check your equipment and antennas and fix any problems before the contest.

The contest last year had a record number of participants and log submissions. It was held near the start of the COVID-19 pandemic and people were looking for things to do. Everyone had fun, so let's plan on spending a few hours on a Saturday evening this year and increase the participation even more. The contest was originally started by ARES as a method to learn the simplex capabilities of your radios and to learn ways to improve your simplex operation in the case of an emergency. ACARTS has assumed the sponsorship of the contest, but the idea for learning the simplex capabilities of your station is still the same. Just think of the recent widespread power outage in Texas to realize how important simplex operation could become. Remember the date, April 10th. The rules will be essentially the same as last year, with three categories, Base, Portable, and Rover. Complete contest rules, a log sheet, and a map of Northeastern Indiana townships can be found on the club

website, www.acarts.com.

The COVID-19 numbers appear to be rapidly improving. There is still an occasional upturn in the figures, but overall, things are looking good. Many of you have been getting your COVID-19 vaccinations as they become available for your age group, and the availability has just been lowered to age 16, making all the club members eligible. The number of inoculations will go a long way in ACARTS being able to hold safe, near normal, unrestricted meetings and functions in the near future. We are not there yet, but it doesn't look like it will be much longer before we hold meetings again. ACARTS has no plans for any meetings in April. The April meeting would have been our Spring Banquet, and even though the restaurants are opening for higher capacities, there is no point in having a social dinner with everyone spread out in small groups. If the numbers continue to improve, there is a good chance that ACARTS will hold the picnic in August.

As the probability of holding meetings again grows near, let me know what kind of programs you would like to attend. Is there a topic that you would like to hear covered, or a speaker that you have heard in the past that you would like to hear again, let me know and we will see if it can be arranged. ACARTS is your club. Let me, or any board member, know what you would like.

73,

Dave Lindquist, W9LKH

ACARTS Officers 2021

President

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

Vice President

Jim Boyer KB9IH
260-489-6700
kb9ih(at)arrl.net

Secretary

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

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 Gnegnagel KC9EZP
260-704-7801
kc9ezp(at)gmail.com

Directors at Large

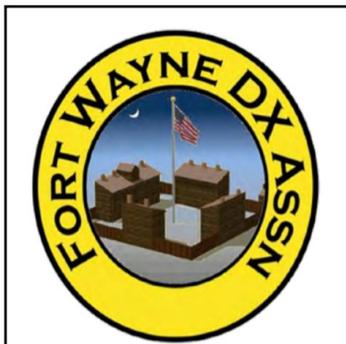
Bob Erb N9PWM
260-466-7772
roberterb(at)hotmail.com

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

(1 open position)

W9INX Trustee

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

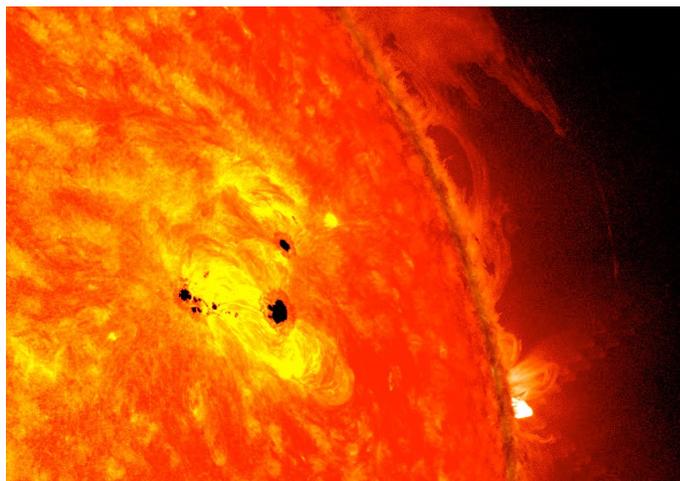


DXing with the 10.7 cm Solar Flux

Carl Luetzelschwab, K9LA

Usually when I head to the shack for some casual DXing

or when I'm getting ready to participate in a DX contest, I check the current 10.7 cm solar flux. I get the current flux from WWV at 18 minutes past the hour, on PacketCluster, at www.qrz.com (the NONBH banner on the home page) or on one of the many space weather websites (for example, <https://spaceweather.com/>).



region of the ionosphere for our DX chasing activities) to allow worldwide propagation on 20 meters during the day and early evening. On a few days of the month, 17 meters will also be available at solar minimum. Thus the value of the 10.7 cm solar flux gives us an idea of propagation on the higher HF bands – 15 meters, 12 meters and 10 meters.

Table 1 gives us an idea of what the 10.7 cm solar flux needs to be over a long period (many weeks – not just a day or two) to offer worldwide propagation on every day of the month on each of the higher bands.

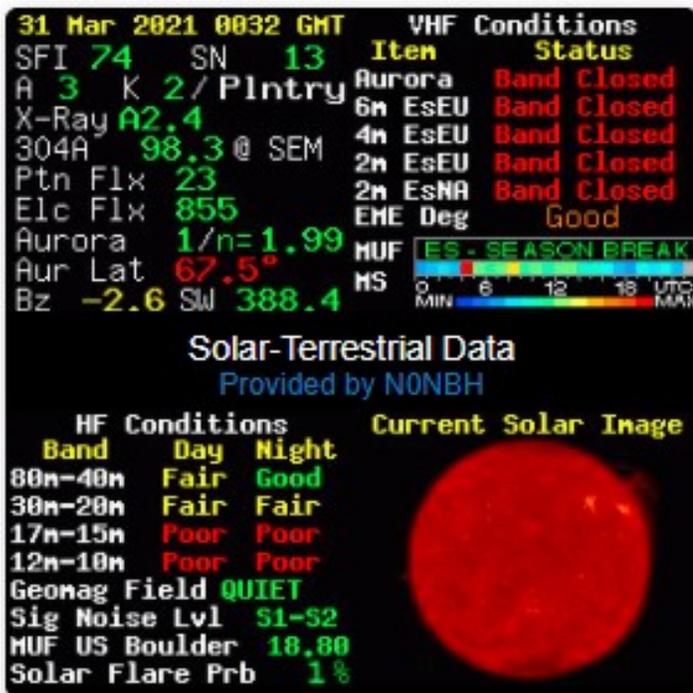


Image: NONBH banner from www.qrz.com

band	10.7 cm solar flux
15m	≥ 90
12m	≥ 95
10m	≥ 105

Table 1

At solar minimum, the 10.7 cm solar flux is in the 65-70 neighborhood – and there may be zero sunspots, too. But there is still enough extreme ultraviolet (EUV) radiation from the sun (the true ionizing radiation for the F2 region – the most important

Realizing that 10.7cm cm solar flux is a proxy for the true ionizing radiation, a good question to ask is “how well does 10.7 cm solar flux correlate to EUV?” Let’s use the plot from last month’s column to answer this question. Figure 1 (see next page) reproduces this plot, but with data updated through February 2021.

Up through September 2020, both the 10.7 cm solar flux and the 26-34 nm EUV (the wavelength range that provides about 60% of the F2 region ionization) varied little. Solar flux was 72 +/- 7% and EUV was 7.1E9 +/- 10%. If it wasn't for the small spike in early June 2020 and the somewhat bigger spike in early August 2020, the percent variations would have been even less. So the correlation would be expected to be pretty decent.

But note what happened after September 2020. Although both parameters spiked up, there were three periods of several to many days in which the 10.7 cm solar flux decreased back down to essentially solar minimum levels while the EUV stayed up. The first period was in the middle of November 2020, the second period was in the middle of December 2020 and the third period was the middle of January 2021 to the middle of February 2021. If you were only watching the 10.7 cm solar flux, you may have written off those periods – but they likely offered good worldwide propagation on the higher HF

bands.

In the March/April 2021 issue of QEX (which is free on-line to ARRL members – along with NCJ), Jerry Spring VE6TL compared the MG II index to the 10.7 cm solar flux to assess HF propagation. MG II refers to the two closely-spaced spectral lines of magnesium around 280 nm. Although a wavelength of 280 nm is too long (not enough energy) to ionize any atmospheric constituent, it is significantly closer to EUV wavelengths than 10.7 cm solar flux, and thus should be a good proxy for EUV. As a side note, 10.7 cm solar flux is about a million times too long in wavelength (a million times too low in energy) compared to EUV.

So you can either track MG II (see the QEX article for the url to access MG II data) and/or EUV (30.4 nm EUV is available on the colorful NONBH banners seen at www.qrz.com and elsewhere), or you can just be aware that the 10.7 cm solar flux may not tell the truth about propagation on the higher HF

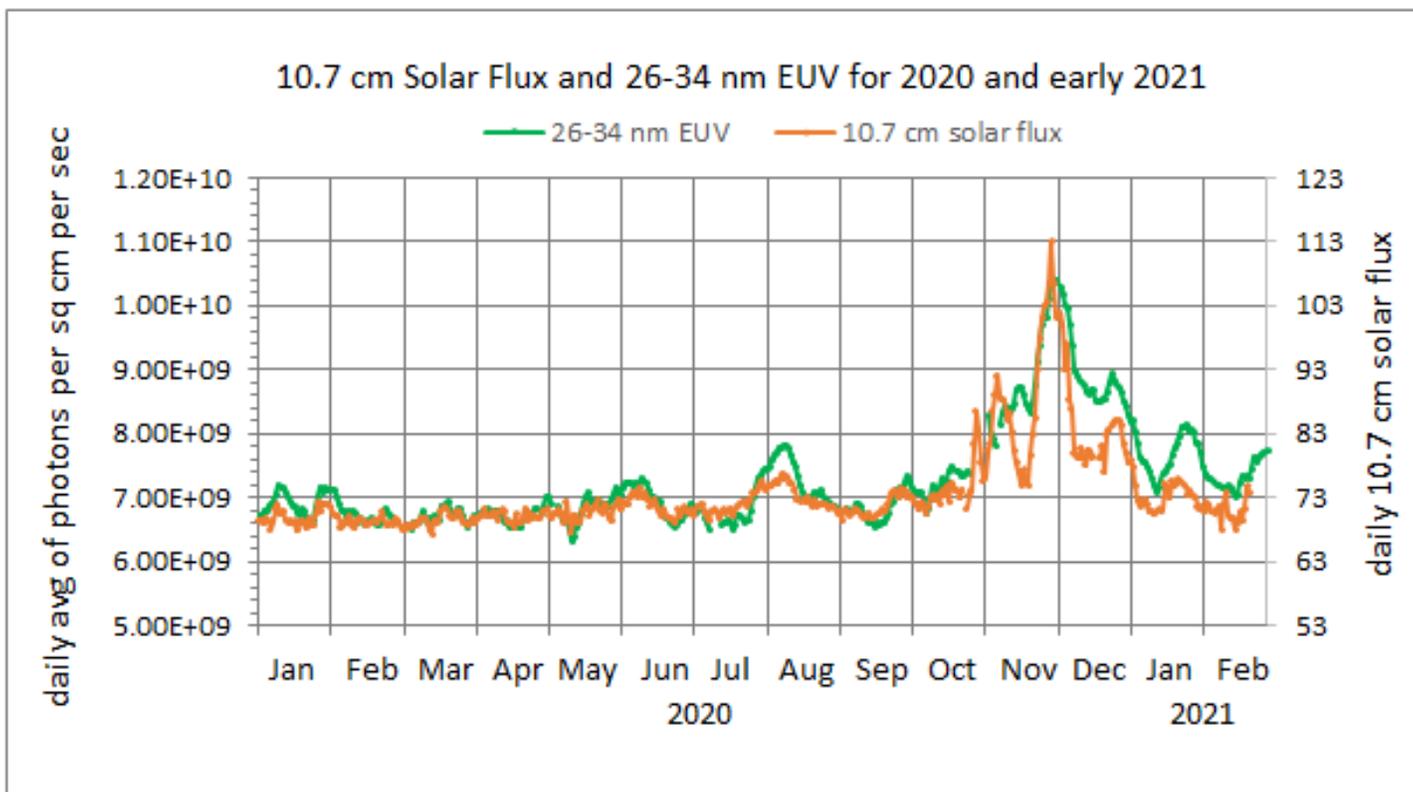


Figure 1

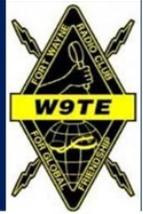
Announcing the first annual

VHF SSB/CW 2M Sprint Classic

Contest to be held on Saturday, April 25th from 1300z to 2200z on 2 Meters SSB and CW only.
Rules, Log sheet, and Summary Sheet found on the Fort Wayne Radio Club website: www.fwrc.info

Questions? Contact Jim, AC9EZ, at dfile13@hotmail.com

*Sponsored by the Fort Wayne Radio Club W9TE
Founded in 1920*



You probably have heard on the local Ft. Wayne repeaters of an upcoming contest called the “VHF SSB/CW 2M Sprint Classic”. Just such a contest is about to occur on Saturday, April 25th, 2021, from 9:00 a.m. till 6:00 p.m. (1300z to 2200z.)

tations entering the contest will be allowed to use SSB and CW on the 2m band, with activity centered on 144.200 Mhz. (+/- 100 Khz. depending on local activity). You can work stations once on SSB and once on CW. If you work a Rover station, you can work them again, once on SSB and once on CW, every time the Rover station moves to a new grid square. Every grid square you work counts as a multiplier - the more multipliers and points, the higher your score!

The majority of stations will probably be using horizontally-polarized antennas, such as a yagi. However, if you only have a vertically-polarized antenna (such as a 1/4 wave vertical or J-pole), then use that antenna! Band openings on 2m can really increase your ability to contact distant stations, with reported distances of up to several hundred miles.

If you do not currently have a yagi for 2m, I would highly recommend that you watch these two videos by KG0ZZ (Dave Tadlock) and KB9RLW on their 2m homemade yagi antenna builds.

<https://www.youtube.com/watch?v=fLOvSLXDudU> (KG0ZZ's 2m coat-hanger yagi)

<https://www.youtube.com/watch?v=hh9beU335s4> (KB9RLW's 2m ladder-line yagi)

Both antennas are fairly simple to construct and provide good performance. If you need help on understanding the design, put out a shout on the local repeater or send me an email (listed on my qrz.com profile). Also, keep in mind that those new to the Fort Wayne Radio Club Foxhunt activities receive a free tape-measure yagi from the FWRC, so that is another option available if you are looking for a 2m yagi antenna.

Certificates and a few plaques (sponsored by the FWRC) will be available for the different category winners and high-score finishes. The entire contest promises some great action and a tantalizing taste of what is possible on the 2m band!

See you in the contest!

Jim, AC9EZ



March 2021

Normally, we start the Fox Hunt season on the first Sunday in February, but sadly this year one of our enthusiastic hunters, Don Glick, K9LI, passed away suddenly before the hunt. FWRC decided to cancel the Feb hunt and focus on March. So, this past Sunday March 7th we started the first transmission with 30 seconds of silent air to honor Don. This began our hunt and the start of the 2021 season. If this first hunt is any indication, this could shape up to be a great year!

From the starting point we had a variety of hunters, some new to FWRC hunts, some experienced, and some new to the sport. The teams of Al, Jim, Carole, and Anne (WB9SSE, K9OMA, WB9RUS, KA9YYI) were there along with Charles, KC9MUT, who had a ride along with newbie KD9QHL. We were happy that the team of N9FEB & ND9C, both from the Indianapolis area drove up to the Fort to participate in one of our hunts. Then there was a new 'team' of several Trine University students and their professor in the form of KC2TCP, N9AMT, KD9OKH, KD9QQW, KW9S, and Abigail (not licensed yet). Also, we had a visit from Fred, KC9EZP and his dog, Izzy. They weren't in the hunt but passing through the Fort.

Prior to this first hunt, the fox team of Linda and Steve (W9LAN & W9SAN) had made several trips around the county searching out new hiding spots. We had identified 6 potential

places but decided on returning to Franke Park back by the old soap box derby hill. With the help of grandson Alex, the microfox was literally hidden under the edge of a large rock and a small pile of leaves completed the disguise. At 1:30 pm, we started transmitting with the 25 watt fox and activated the microfox, the hunt was on! It was a beautiful late winter day with plenty of sunshine, but the temperature was not too warm in the range of 40 degrees. Since we were only about 6 miles from the start point, we figured it would be a short time before the hunters started showing up. Boy were we wrong! After about an hour we began to wonder if our "easy" hiding spot was anything but!

At just over an hour from start, KC9MUT came wheeling into the parking area. This was when we discovered that the microfox, which was equipped with a new stealthier stubby antenna, didn't seem to be putting out very much signal. As we got closer to the hiding spot in a clump of trees and brush, we could hear it on the fox frequency of 146.430 MHZ. Almost absent was the third harmonic at 439.290 MHZ and you needed to be closer to hear that signal.

Despite the RF strength issues, Charles was able to find the fox straight away. Then the truck with Indy hunters, N9FEB & ND9C, pulled into the lot and they got right into the search. These two experienced hunters have been around the state literally from Muncie to Bedford, and they quickly found the microfox as well. We noticed they had a doppler system in their truck to get localized. Hmmm.... KD9QHL, a newbie from the Fort who rode along with Charles was next. The Burke/Pliett team showed up next and dove in. Finally, the Trine University team was on site, and started searching.

The final scores and finishing order are included below.

All in all, a good day to hunt! One added challenge to having the hunt in Franke Park, is that over on Wells Street, there is a 150 foot tower with high power paging transmitters. This added RF in the area makes it difficult to use some of the common fox hunt devices, such as offset attenuators, since the front end of these circuits tend to be easily overloaded! Some Chinese SDR HT's are also susceptible to this overload issue. But we all worked it out.

We hope to have our next hunt on April 11th. Why not take the time to spend an afternoon doing some Radio Direction Finding? It is a lot of fun and we are always ready to help any newbies!

73, Steve & Linda & Alex

FOXHUNTER	MARCH 2021 SCORE	YEAR-TO-DATE SCORE
WB9SSE	3	3
WB9RUS	3	3
KA9YYI	3	3
K9OMA	3	3
KC9MUT	6	6
W9SAN	8	8
W9LAN	8	8
ALEX	8	8
N9FEB	4	4
ND9C	4	4
KD9OKH	2	2
KD2TCP	1	1
KW9S	2	2
KD9QQW	1	1
N9AMT	1	1
ABIGAIL	2	2
KD9QHL	5	5



HIGHLIGHTS FROM THE
MARCH FOXHUNT
Join next month!



Upcoming Foxhunt Dates for 2021
April 11
May 2
June 6
July 11
August 8
September 19
October 3
November 7
<i>Stay tuned to HamNews, local nets, and the club websites for updates!</i>



**FOR
SALE**

For sale and wanted listings in this section are provided to members of the Fort Wayne Radio Club, the Allen County Amateur Radio Technical Society, the Fort Wayne DX Association, and to other local hams free of charge! Listings can be renewed upon request to the editor (see pg. 2 for contact information).

- For Sale: Kenwood TS-520S Vintage HF Transceiver – Good condition, 160-10 meters, \$300 or Best Offer

Please contact Gary, KB9TUI at kb9tui (at) gmail.com or call 260-450-0980

- For Sale: MFJ-259B Antenna Analyzer and external AC supply. Analyzer covers from 1.8 MHz to 170 MHz. It measures antenna SWR, coax loss, capacitance, inductance, and can be used for adjusting tuners. All are in very good condition. Internal alkaline batteries are included, but are not new. \$180.00

Please contact Bill, K3HZP at HZP_Electronics (at) jun0.com



- For Sale: Cushcraft 2 meter long Yagi—similar item in today's catalog is \$380.00 new!
- Cushcraft 10 meter "Ten 3" three element Yagi—same item listed new at \$360.00!
- Your price: \$50 buys either one. Proceeds to benefit FWRC.

Please contact Jim Mast, W8HOM at 260-447-1225.

Your item could be listed here next month! Just send the editor an email with your listings before April 29th! See page 2 for contact information.

For Sale / Wanted

Continued

- For Sale: 2019 chrome Vibroplex bug, also includes optional Vari-speed to slow down the bug's speed. \$250

Please contact Al, K9FW at k9fw (at) frontier.com

- For Sale: CW paddles kit. Assembled and works well. This kit was reviewed in the December edition of QST. \$25
- Morse Tutor Board. Assembled and works well. Includes manual. This kit was reviewed in May edition of QST. \$30
- Pair of FRS/GMRS handheld radios. Bought new in the fall, only used once. \$40

For any of these items, please contact Terry K9FMX at tjbowman (at) frontier.com or at 260-705-7128



- Butternut HF2V 40/80m vertical antenna. Free to a good home.

Please contact Ken, N8KR at n8kr (at) hotmail.com

For Sale / Wanted

Continued

The Fort Wayne Radio Club has the following items available for sale. Please contact Steve W9SAN if you are interested in any of these items at w9san (at) arrl.net or leave a message at 260-482-4039.



Yaesu FT-207R HT, 2 meters, condition unknown. Make an offer! No antenna or charger. Has ni-cad battery inside; function unknown.



Cobra 29, 23 channel CB. Condition unknown. No manual or box. Make an offer!



MFJ CW reader. Works fine, comes with manual and battery included. \$40 firm.



Heath HD-1410 iambic keyer. Works fine. Comes with power cord and harness to drive a rig with solid state input. Paddles are adjustable for travel and tension. \$25 firm.



Heath 2 meter mobile antenna; short coax. Free to a good home!



Heath MT-1 transmitter. Good parts radio. \$5 OBO; cabinet is good. No power supply.



Hallicrafters shortwave receiver. S-120. Works but very poor sensitivity. Good parts radio. \$2 OBO. Not a photo of the actual radio. Cosmetic condition is fair.



Audio oscillator. Operation unknown. \$5 OBO

Selected Contests for April 2021

CWops Mini-CWT Test	0300Z-0400Z, Apr 1
SKCC Sprint Europe	1900Z-2100Z, Apr 1
Florida State Parks on the Air	1400Z-2200Z, Apr 3 and 1400Z-2200Z, Apr 4
Mississippi QSO Party	1400Z, Apr 3 to 0200Z, Apr 4
Louisiana QSO Party	1400Z, Apr 3 to 0200Z, Apr 4
SP DX Contest	1500Z, Apr 3 to 1500Z, Apr 4
EA RTTY Contest	1600Z, Apr 3 to 1600Z, Apr 4
North American SSB Sprint Contest	0000Z-0400Z, Apr 4
QRP ARCI Spring QSO Party	0000Z-0600Z, Apr 10
SKCC Weekend Sprintathon	1200Z, Apr 10 to 2400Z, Apr 11
FTn DX Contest	1200Z, Apr 10 to 1200Z, Apr 11
Nebraska QSO Party	1300Z, Apr 10 to 0100Z, Apr 11 and 1300Z-2200Z, Apr 11
New Mexico QSO Party	1400Z, Apr 10 to 0200Z, Apr 11
North Dakota QSO Party	1800Z, Apr 10 to 1800Z, Apr 11
Georgia QSO Party	1800Z, Apr 10 to 0359Z, Apr 11 and 1400Z-2359Z, Apr 11
Holyland DX Contest	2100Z, Apr 16 to 2100Z, Apr 17
Worked All Provinces of China DX Contest	0600Z, Apr 17 to 0559Z, Apr 18
YU DX Contest	0700Z, Apr 17 to 0659Z, Apr 18
CQMM DX Contest	0900Z, Apr 17 to 2359Z, Apr 18
Texas State Parks on the Air	1400Z, Apr 17 to 2000Z, Apr 18
Michigan QSO Party	1600Z, Apr 17 to 0400Z, Apr 18
Ontario QSO Party	1800Z, Apr 17 to 0500Z, Apr 18 and 1200Z-1800Z, Apr 18
ARRL Rookie Roundup, SSB	1800Z-2359Z, Apr 18
Run for the Bacon QRP Contest	2300Z, Apr 18 to 0100Z, Apr 19
10-10 Int. Spring Contest, Digital	0001Z, Apr 24 to 2359Z, Apr 25
Helvetia Contest	1300Z, Apr 24 to 1259Z, Apr 25
Florida QSO Party	1600Z, Apr 24 to 0159Z, Apr 25 and 1200Z-2159Z, Apr 25
SKCC Sprint	0000Z-0200Z, Apr 28

Radiosport

This information comes from the WA7BNM Contest Calendar at contestcalendar.com and is gratefully acknowledged. It is deemed accurate as of the time of publication.

Area Nets					
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	3.940	Daily Indiana Traffic Net	8:00 PM	50.580 USB	FWRC 6-Meter SSB Net
6:00 PM	3.940	Daily Indiana Traffic Net	9:00 PM	146.940-	Allen Co. ARES Training Net (141.3 PL)
6:30 PM	146.880-	IMO (alternate is 146.760)	Wednesday		
7:00 PM	147.015+	Tri State Two Meter Net	7:00 PM	146.760-	FWRC YL 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	9:00 PM	146.940-	Help and Swap Net (141.3 PL)
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	1.965 & 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)

1. All times local time. **Any changes or corrections should be submitted to the newsletter editor at drjoshlong (at) gmail.com.**
 2. NEIPN is direct accessible via any BPQ Chat Node (or through Node hopping etc.) via other packet frequencies in this area and other areas through other nodes (it is locally direct accessible on 145.53 in NC & NE Indiana/NW Ohio and SE Michigan using KA9LCF-11, KC9VYU-11, N9LCF-11, N9PXO-11, K9BIF-11) Most BPQ Nodes use an SSID of -11.
 3. Reflector REF024B.
 4. Net starts using BPSK-31 and switches to BPSK-250 after roll call to pass traffic 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>

Fort Wayne repeaters							
Frequency	Offset	Tone/Notes	Callsign	Frequency	Offset	Tone/Notes	Callsign
145.330	-0.6 MHz	--	W9FEZ	443.100	+5 MHz	DMR	K9MMQ
146.880	-0.6 MHz	--	W9INX	443.275	+5 MHz	P25	K9MMQ
147.255	+0.6 MHz	--	W9INX	442.6375	+5 MHz	--	N9MTF
146.760	-0.6 MHz	--	W9TE	444.800	+5 MHz	--	W9FEZ
146.910	-0.6 MHz	--	W9TE	442.99375	+5 MHz	D-Star	W9TE
146.940	-0.6 MHz	141.3 FM C4FM	W9TE	444.8750	+5 MHz	141.3	W9TE
224.780	-1.6 MHz	--	W9FEZ	53.3300	-1 MHz	--	W9FEZ

FWRC Membership Application

Name: _____ Call Sign: _____
 License Class: _____
 Street address: _____ City: _____
 State: _____ ZIP: _____ Phone #: (_____) _____
 Email address: _____ ARRL Member? _____

(ARRL membership helps the club maintain ARRL affiliation)

May we list your name, call & email address in our membership roster & on our club web site?

Fort Wayne Radio Club dues:

Regular membership	\$20.00 / year
Family membership ¹	\$30.00 / year
Student membership ²	\$5.00 / year
Associate membership ³	\$20.00 / year

(Memberships for July-December are ½ the stated amounts)

Please attach a check to this form (paying by check is strongly encouraged) made out to:

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

Please list all names and calls on an attached sheet.

K-12 or full time student.

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 ARRL affiliation)

May we list your name, call & email address in our membership roster & on our club web site?

ACARTS dues:

Regular membership	\$12.00 / year
Additional family members ¹	\$6.00 / year
Student membership ²	\$6.00 / year
Associate membership ³	\$6.00 / year

(New regular memberships are \$1.00/month)

Please attach a check to this form (paying by check is strongly encouraged) made out to:

Allen County Amateur Radio Technical Society (check number _____) and bring to a club meeting or mail to:

A.C.A.R.T.S.

P.O. Box 10342

Fort Wayne, IN

Please list all names and calls on an attached sheet.

K-12 or full time student.

Unlicensed member.