

August 2021 Volume 22

Issue 8



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More!

Ramblings from the Editor

Another month is in the history books, but the good news is that summer is still here—for now...

July included a number of local ham radio events, including the Auburn hamfest. I was looking forward to this event this year and was not disappointed. If you were unable to attend the hamfest this year, I recommend that you mark your calendar for 2022.

There are a few local events scheduled for August:

- The annual ACARTS picnic is scheduled for Saturday, August 7th. See Dave's column for more information.
- The next foxhunt is scheduled for August 8th.
- The annual FWRC tailgate hamfest is also on tap for this month. Check out the updated location in this edition.
- The Peru hamfest is on Saturday, August 28th.

If you would like to include any information in the September edition of Han-News, please share that information with me by August 30th.

Catch you on the airwaves, at a picnic, or at a hamfest soon!

73,

Josh, W9HT



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

Skywarn® Net Changes Backup Frequency

By Jay Farlow, W9LW,

Manager, Allen County Skywarn net

The Allen County Skywarn® net has published an updated net operations manual that changes the net's alternate frequency. Effective immediately, if the ACARTS 146.88 MHz repeater 2. Recent completion of the Skywarn storm is unavailable for any reason, the Skywarn net will operate on the FWRC 146.94 MHz repeater. That repeater requires stations to transmit a continuous tone-coded squelch system (CTCSS) tone of 141.3 Hz. Users who also enable tone decoding on their radios (on the same tone frequency) will avoid hearing digital noise when the repeater is operating in C4FM (Yaesu Fusion) mode.

Previously, the net used the FWRC 146.76 repeater as a backup to the ACARTS repeater. Net leaders made that decision, however, before the FWRC moved the 146.94 MHz repeater antenna to its current, higher elevation. From its new site, the repeater provides better coverage of all of Allen County than does the 146.76 MHz repeater.

Remember, if severe weather enters the area and you can't activate the ACARTS 146.88 MHz repeater, look for Skywarn activity on the 146.94 MHz repeater.

The latest version of the net operations manual is available on the Fort Wayne Radio club website (fwrc.info) via the "Skywarn®" choice in the main menu.

New Skywarn Net Control Station Operators Sought

Net Control Stations (NCS) are essential to effective operation of the Allen County Skywarn net. Currently, the net lacks enough NCS operators to assure consistent net operations. This is especially true during weekdays, when several of the few current NCS operators are unavailable due to their employment.

The net therefore eagerly seeks local hams who are willing to serve in this important role. The only requirements are:

- 1. Ability to reliably reach both the 146.88 MHz and 146.94 MHz repeaters.
- spotter class taught by the Northern Indiana NWS office.
- 3. Familiarity with the Allen County Skywarn Net Operations Manual (see above).

Experience serving as NCS of any other net is helpful but not required. Likewise, the ability to reach the FWRC repeater on 444.875 MHz is helpful, but not required.

Benefits of NCS status include (but are not limited to):

- Access to a special channel on the collaboration tool, Slack, where NCS operators discuss severe weather forecasts and activation plans.
- Access to NWSChat, the National Weather Service (NWS) private internet chat system.
- The pride that comes with knowing one has helped protect fellow citizens by assuring that storm spotter reports reach the NWS promptly.

If you're willing to help fill this important role, please contact Jay Farlow at w9lw (at) arrl.net.



16th Annual - North Central Indiana Hamfest



Saturday, August 28, 2021 9:00 AM to 2:00 PM (EST) Miami County 4H Fairgrounds 1029 W. 200 North, Peru, IN

Hosted by the Cass County, Grant County, Miami County & Kokomo Amateur Radio Clubs







Two Air Conditioned Buildings - Plenty of Tables

Talk-In on 147.345+ (131.8) Coordinates: 40° 47.521' N 86° 5.635' W

Ticket Information

\$5.00 at the Door – 17 and Under FREE FREE Parking, Handicapped Parking Available

Raffle Prizes

Icom IC-2730A VHF/UHF Mobile
uBTX Version 6 HF SSB/CW Transceiver

On Site Camping - Only \$30.00/Night

Electric & Water Hookups 2 Sewage Dumpsites Restrooms with Showers Contact: Dave McDougle, Fairground Facility Manager at 765-327-5398.

Vendor Information

Setup Times: Friday, 5:00 - 8:00 p.m. & Saturday, 7:00 a.m. to 8:45 a.m. Inside Tables: Reserved tables \$5.00 each Tables day of event - \$7.00 each

Admission: \$5.00 / Person

Reserve Your Tables ASAP - Call Bill McAlpin at 765-244-0511

Free Laurel VE Testing



Bring two forms of ID - One must be a photo ID If already licensed and upgrading, bring a copy of your license. The FCC now requires an FRN Number to test. If you need more info about testing, email: billmcalpin@comcast.net

Don't Miss the Forums — See the Back of Flyer

Breakfast & Lunch Available On-Site

Fort Wayne Radio Club P.O. Box15127, Fort Wayne, IN



Carole's Corner for August 2021

Hello everyone,

Another month has flown by. It

was an interesting month. On Sunday July 25, we had a Special Event Station set up in Parkview Field operating during a Tin Cap's home game. Charles Ward, KC9MUT and Tom Rupp. K8UT donated time and equipment for the event. They operated on 40 meters CW and SSB using an end fed antenna. They made about 50 contacts up and down the Eastern Seaboard and up into Canada. We also had quite a few people stop by and ask questions about our hobby. We had a few people take information, so hopefully we have laid the groundwork that will ultimately result in a few new hams. To top it off, I was interviewed by Mike Maahs, the Tin Cap play by play guy on ESPN radio AM 1380 during the 4th inning. So I was able to educate him and his listeners about our hobby.

We will have our annual Tail-Gate Hamfest on Friday the 20th of August. Location will be announced later [in this edition of HamNews].

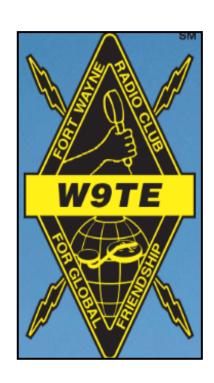
Our meeting this month will feature FWRC Vice President Paul Prestia, KC3OZP, who will an-



swer your questions on how to become registered on the D-STAR database and then on how to configure your D-STAR radio for operation once you're registered. We have received a number of inquiries on these topics from several club members. So Paul will disclose how it's done. Hope to see you all at the Library in Downtown Fort Wayne, August 18 at 6:00.

73,

Carole WB9RUS



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

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

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Bob Streeter, W8ST

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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

14 July 2021

The July meeting of the Ft. Wayne Radio Club was held at the Allen County Public Library (downtown) on 14 July, 2021. We made use of meeting room C which provides room for about 35 people in a Corona virus compliant environment. (We have also reserved this venue for the August meeting. Note that the August meeting will start promptly at 6:00 pm because the library closing time has been established as 8:00 pm.

Hopefully we will be able to hold our regular meetings at the Salem United Methodist Church venue starting in September. Stay tuned for further announcements.

Club President Carole Burke, WB9RUS welcomed the attendees (about 16) and all present introduced themselves by their name and call-sign. Following introductions we executed the pledge of allegiance ceremony according to our usual practices.

Treasurer Bob Streeter, W8ST provided the current club Treasury statistics as of 14 July, 2021, to wit:

Savings- \$1,841.77

Checking- \$5,349.43

Vanguard Money Market

\$11,325.83

Year-To-Date Income

\$2,047.00

Year-To-Date Expenses

\$1,398.66

Club members count

Steve Nardin, W9SAN reported on the July foxhunt. We had only one foxhunt team show up for the July adventure. This was the team of Jim and Annie Pliett, K90MA and KA9YYI, plus Al Burke, WB9SSE. Carole Burke was not able to attend as she was in Indianapolis participating in our oldest granddaughter's wedding shower. Steve and Linda Nardin plus their grandson Alex served as the fox, hiding out near the junction of St. Joe and Rothman Roads at a I&M pumping station.

The microfox was located a little over a half hour into the hunt, so the Pliett/Burke team will serve as the fox for the August (8th) contest. Details of the hunt can be found in the Foxhunt Chronicles for July.

Al Burke reported on the Auburn Hamfest. The FWRC had reserved a table and we brought about eight pieces of equipment that had been donated to the club. We wound up selling three items which added \$585.00 to the club treasury. The Hamfest attendance was good, about the same as last year's event.

Carole reported that plans are moving ahead to set up a Special Events station at Parkview Field for the Tin Caps game on Sunday, 25 July. Carole and Al are meeting with Tin Caps Event Coordinator on the 19th to work the details.

The August meeting will feature Paul Prestia, KA3OPZ as our speaker who is planning a "D-STAR for Dummies" presentation which is intended to answer a few questions club members have regarding how to navigate through getting registered for D-STAR and how to set up their

equipment. It seems several members have acquired D-STAR capable equipment and need to get their callsign registered with the D-STAR network. which can be a little intimidating. The same can be said for determining operating parameters for specific equipment that need to be programmed into a particular radio in order to participate in the D-STAR environment. The FWRC operates a UHF D-STAR repeater at its Parrott Rd. repeater location which has a fairly large footprint in and around Allen County.

Following the business meeting Larry Lett provided a description, demonstration, and the history of railroad telegraphy which evolved in the ninetieth century and matured into the twentieth before the advent of modern radio communications. Larry was employed as a railroad telegrapher starting in 1953 at the age of seventeen working for the Wabash Rail Road around Montpelier, Indiana, retiring just after the turn of the century in New Haven.

The meeting adjourned about 7:30 pm.

Respectfully submitted,

Al Burke, WB9SSE

Secretary, Fort Wayne Radio Club

Upcoming FWRC Meetings 6pm at the downtown ACPL 8/18

Stay tuned for more dates



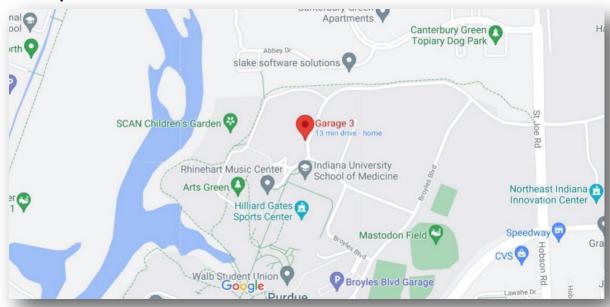
ANNUAL TAILGATE HAMFEST

FRIDAY, AUGUST 20

See the next page for more details for this event!

FWRC Annual Tailgate Hamfest: Details

This year's FWRC Tailgate Hamfest will occur on Friday 20 August and the venue has changed from the Good Shepherd United Methodist Church to Parking Garage #3 on the Purdue-Ft. Wayne north campus.



We will use the 2nd level of the garage which means that we will be:

- 1. Out of the sun,
- 2. Thus protected from rain, should it occur, and,
- 3. Not have to put up with mosquitoes, bees or other critters, and,
- 4. Have access to rest rooms.

Set up will begin at 5:30 pm and the hamfest itself will commence at 6:00 pm.

Easiest access to the garage is from St. Joe Road as can be seen on the map. There is no admission, and everyone is welcome!



FWRC SPECIAL EVENT ACTIVITY AT TINCAPS BASEBALL GAME CELEBRATING THE FWRC's 100 YEAR ANNIVERSARY

The FWRC set up a 40M cw/phone Special Event station at Ft. Wayne's Parkview Field, home of the Fort Wayne Tin Caps High-A baseball team, on a beautiful, sunny Sunday afternoon on 25 July, 2021. The special event was the celebration of the Ft. Wayne Radio Club's

100th year. (Actually, 2020 marked the club's 100th year, it being started in 1920, but the Covid situation caused the club to delay the celebration for one year). But, better late than never.

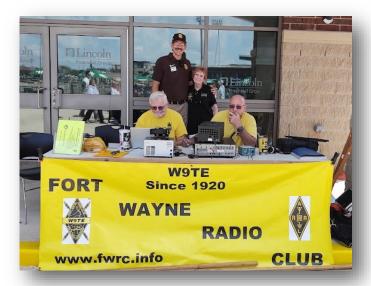
The Tin Caps President and General Manager Mike Nutter and the rest of his staff were very gracious in allowing us to set up a station, run an antenna and operate during the ball game. The team (Carole Burke, WB9RUS, Charles Ward, KC9MUT, Tom Rupp, KU8T and Al Burke, WB9SSE) installed the station below the Tree Top concourse which is at the end of the first base line.

Charles brought his Yaesu FT-1000 transceiver and Al brought the club's keyer. We installed the FWRC's end-fed 40M dipole about 25' in the air running in a north-east to south-west direction between the upper reaches of the Tree Top seats to a light standard on the right field concourse. It turned out to resonate very well around 7.190 MHz and had a very low VSWR.





Mike Limmer, Tin Caps Vice President of Marketing and Promotions was the man on the spot allowing us access to the upper region of the Tree Top seating section, provided a very useful step ladder for our use in installing the antenna, helped us install the antenna, and in general had other members of the Tin Cap staff provide support where needed.



We started operating on 7.193 MHz about 11:15 am on Sunday and made immediate contacts down to the south east (North Carolina, Tennesee), and then made contacts all around the compass and up into Canada. All in all we had 50 QSO's making our last contact at 3:12 pm. Everyone we were in QSO with congratulated the

club on its 100th year anniversary.

During the third inning Carole was interviewed by Tin Caps play-by-play announcer Mike Maahs on ESPN 1380 radio. So she had a great opportunity to tell Mike and his audience all about Ham Radio and the Fort Wayne Radio Club and our 100th year celebration.

All throughout the game we worked at attracting passers-by from the constant flow of traffic walking past our table to tell them about the hobby and the FWRC and pass out handouts describing how one get's their ham radio license. We may have set the hook into a few of them.

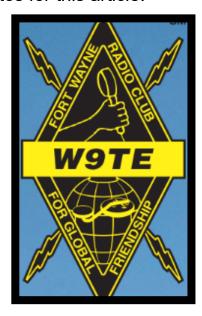
It was a closely fought game but ended with the Dayton Dragons winning 5 to 3 in nine innings although the Tin Caps had a rally in the ninth and we thought they were going to bring it home. Unfortunately that was not the case.

So we had a successful Special Event activity, had a lot of fun operating and enjoyed a little baseball, some ice cream, and a hot dog, and a beer.

73,

Al Burke, WB9SSE

Note from the Editor: Thank you to Al, WB9SSE and Jerry, KD9QHI for sharing the photos for this article!

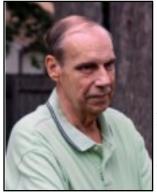


State of the Arts

Allen County Amateur Radio Technical Society

P.O. Box 10342, Fort Wayne, IN

ACARTS President's Message for August 2021



Things
are finally
getting
back to
normal.
ACARTS
was able
to hold its
first in-

board meeting since March of 2020. The Salvation Army no longer had any restrictions or conditions for the use of the room. The Red Cross has stated that they expect their facility to be open to external groups in late summer or fall, so hopefully, we can resume holding general meetings in September.

The ACARTS Picnic will be held on Saturday, August 7th at the Jefferson Township Park, east of New Haven. Plan on arriving around 5:00 p.m. with the food served around 6:00 p.m. Members of ACARTS, the Fort Wayne Radio Club, and the Fort Wayne DX Association are invited. The club will provide hamburgers and hotdogs, as

well as chips and drinks Plan on bringing a pot-luck item such as salad or dessert. Charles Ward, KC9MUT, will again be doing his excellent job as grill master. The pavilion has picnic table seating for around fifty people, so you might consider bring a lawn chair, so you don't have to spend the entire time on a hard picnic table. Response has been good, with many of the attendees form past years expressing their intention to be there this year. I need to know how many members and guests plan on attending by Monday, August 2nd, so we know how much food to purchase. Contact me at w9lkh (at) comcast.net to let me know that you plan on attending. I hope to see you at the picnic for a summer evening full of fun, conversation and, above all, good food.

73,

Dave Lindquist, W9LKH

Next ACARTS

August 3rd

ACARTS Officers 2021

President

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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

ACARTS July 2021 Board Meeting Minutes

The meeting was called to order by Dave, W9LKH.

Dave announced that the ACARTS Picnic would be held on Saturday, August 7th at Jefferson Township Park. The picnic will start around 5:00 p.m. whit food ready about 6:00 p.m. Dave stated that Steve, K9SKS, will pick up the food items and Pat, W9LKH XYL, will bring plates, silverware, paper items, and cleaning supplies. He added that we will need someone to pick up the drinks and ice. Dave stated that we need some volunteers to arrive early to arrange and clean the tables, and a volunteer to clean up and take the trash to the dumpster. Fred, KC9EZP, said that he would contact Charles, KC9MUT, to confirm that he was willing and available to be the grill master again this year.

Dave announced that the August board meeting would be on the first Tuesday, August 3rd, so that it would occur before the picnic.

Dave stated that the Red Cross expects their facility to be available to outside groups by late summer or early fall. Tom, KU8T will be one of the first speakers when ACARTS general meetings resume. His presentation on Parks on the Air (POTA) was the first to be cancelled in March 2020, when COVID-19 lockdowns began.

Dave gave an update on that status of the 146.88 repeater, letting the board know what had been done and when it was expected to be back in service.

No other business was discussed.

The meeting was adjourned at 8:00 p.m.

Submitted by Dave Lindquist, W9LKH



Sizzlin', smokin' and satisfying

ACARTS ACARTS PICTOR

Saturday, August 7th

5pm, Jefferson Township Park



Chasing the 13 Colonies

Carl Luetzelschwab, K9LA

Way back in 2014 I read about the "13 Original Colonies Special Event". I got excited about it, and chased the thirteen original states. I ended up working all thirteen of them, but missed the two extra special event stations: WM3PEN and W3FT. So I didn't make a 'clean sweep'.

Fast forward to 2020. I again chased all thirteen colonies. This time I screwed up my log and missed South Carolina. Nuts. But I did work one of the two extra special event stations – WM3PEN in Philadelphia. I missed GB13COL in Great Britain. Another 'nuts'.

So this year I decided to go all out and work all the stations. The thirteen colonies (states) used K2A thru K2M. The three extra special event stations were WM3PEN in Philadelphia, GB13COL in Great Britain and TM13COL in France.

I'm happy to report that my effort was a success – I made a 'clean sweep' of all sixteen stations (thirteen colonies plus three extra special event stations). Table 1 is the breakdown by band/mode. SSB was the most productive mode. 20 meters was the dominant band.

band	CW	SSB	stations
40m	2	5	CT, SC, GA, NC, PA, VA, DE
20m		8	NJ, NH, NY, MA, WM3PEN, RI, GB13COL, TM13COL
15m	1		MD

Table 1

Twelve of my contacts were on July 1. Three were on July 2. My last contact, TM13COL was on July 3. I have to admit I thought that I might not work this one. But they showed up on July 3 on 20 meters with a decent signal and went into the log rather easily.

I already sent in my log and I will receive a very nice certificate. Figure 1 is the certificate from the 2014 event. The 2020 certificate is equally attractive. And I'm sure the 2021 certificate will be attractive, too.

If you missed this event, put in on your calendar for next year around the 4th of July. It's a short event and should be fun to chase all the stations. Propagation should be better with Cycle 25 in its initial ascent.



MOST PRECIOUS BLOOD **SCHOOL** RADIO **CLUB**

My name is Vicky Luetzelschwab, AE9YL, and I started a school club where I was working.

I started the school club K9MPB about 5 years ago. At that time, I was a science teacher in for Junior High. I was asked if I want- couple of the students ed to teach a "fun" subject for the year. I decided to teach Morse Code. Eight students were in my class. Besides teaching Morse Code, in science the students learned about all kinds of waves. Carl, K9LA, came in and did some demonstrations about waves. This is how the club got started.

The following year I invited grades 3-8 to learn Morse Code after school. I had previously been to the

Teacher's Institute at ARRL Headquarters. Fourteen students came to our first club meeting. Some time was spent learning Morse Code, and the rest of the time we were working on building a K1EL Finger Keyer. Carl and I taught the kids how to solder, made some QSO's, did a 2 meter fox hunt, and taught the names of various electronic parts and why those parts were needed.

Covid-19 happened, and we had to use Zoom for our Morse Code class. From a teacher's perspective, not all students learn using Zoom versus in person. A struggled using Zoom. In

the Fall of 2020. when school started back in person, the principal did not want any mixing of grades or any after

school activities. I talked to the club about using Zoom. They did not want to use Zoom anymore.

Right now, the club is in limbo. Carl and I have talked about having a "kids club" at our house. We have an unattached garage we could use, and it would also be good for Field Day Operations. I am semiretired from teaching. I am now an aide at Saint Vincent de Paul School. I will see how this job works out. 73,

Vicky, AE99L



Tuning Up

2 Meter Mobile: A Proud Ham Tradition

By Jim, AC9EZ

One of the most common pieces of equipment in the typical US ham shack is the 2 meter mobile transceiver. Although many hams (your author included) use these "mobile" transceivers as base units for 2 meter FM operation, many amateurs nation-wide enjoy using these transceivers from their vehicles, hence the "mobile" name.

Most 2 meter mobiles, regardless of manufacturer, have several features in common. such as: the ability to only transmit using the FM mode, 50 watts of power output, CTCSS (PL) tone capability. large menus, and seemingly endless memory slots to store favorite operating frequencies. Another common convenience for these small transceivers is a feature that automatically selects the proper offset frequency for the majority of repeaters in the United States. This feature allows the user to dial in a frequency for a repeater and immediately transmit with the transceiver selecting the proper +/- 600 Khz. input frequency automatically.

But these standard features were not so common in the re-

cent past. In fact, the addition of features as simple as automatic repeater offset would have seemed like a luxury to the hams of the 1980s and early 1990s. For this month's article, let's take a short drive down memory lane and view some of the popular 2 meter FM mobiles that were sold and used in the days of yore.

2 Meter Mobile: The Beginning

2 Meter mobile development actually paralleled the mode "evolution" of HF radios. Just as AM was the dominant voice mode through the mid-20th century on the HF bands, so too AM was the dominant voice mode in the 2 meter mobile market all the way into the 1960s. Some 2 meter mobile transceivers. like the Heathkit HW-20, had the ability to also transmit in CW mode in addition to the standard AM mode. These early mobile transceivers were big, heavy, and had low power output. Using the Heathkit HW-20 as an example, this "mobile" transceiver (named the "Pawnee") weighed over 12 pounds and was 12" wide, 6" high, and 10" deep (720 cubic inches in volume!) Its power output was typical of the time, with 10 watts output using tube finals.

2 Meter Mobile: The 1970s

The introduction and subsequent adoption of FM for 2 meter mobile use came on the heals of the introduction of "solid state" (meaning either zero or few tubes) construction. The 1970s saw the beginning of the Citizen's Band

boom days, with folks buying up CB radios right and left. The amateur market for 2 meter mobile transceivers also enjoyed wide popularity, with smaller transceivers being produced and numerous repeaters appearing for the 2 meter band.

One of the popular 2 meter mobiles was the HW-202 produced by Heathkit. Figure 1 shows a photo of your author's HW-202, along with the 202's accompanying power supply the HWA-202-1. The HW-202 was a crystal-controlled, kitbuild transceiver, with transmit/ receive frequencies determined by crystals. There was no VFO, nor were there any memories, repeater offsets, PL tone abilities, or a menu. Power output was again a maximum of 10 watts. The HW-202 weighed only 9 pounds, with dimensions of 8.25" x 2.75" x 9.88" (a volume of only ~224 cubic inches). This transceiver was released in the early 1970s, and it actually was a "solid state" transceiver, using transistors instead of tubes.



Figure 1

2 Meter Mobile: The 1980s

The 1980s was a decade of rapid progress, at least in terms of features for mobile radios. Starting in 1979 and lasting into the 1980s, Kenwood produced a mobile transceiver known as the TR-7600. This mobile transceiver weighed just three pounds, and its dimensions were 6.3 x 2.4 x 10.2 inches (a total volume of ~154 cubic inches). The transceiver had a high - low power output setting between 10 and 1 watts. Unlike the HW-202, the TR-7600 was much more advanced, including an actual frequency read out display, a genuine VFO for changing frequency, a control to switch between simplex operation and +/- 600 Khz. offset (repeater) operation, and a dedicated "memory" function that could hold one - yes, one - memory. To set the memory, you simply dialed in the desired frequency on your VFO controls and pressed/released the upper right pushbutton marked "M". You could then dial to another frequency, but always recall the memory frequency by pressing the latching pushbutton marked "MR". The offset frequency was manually switched by the "Mode" selector switch located on the lower right of the radio's face.



Perhaps the most interesting feature of the TR-7600 is the fact that the radio had an optional PL tone board that could be installed inside the radio, allowing the radio to transmit a sub audible PL tone for repeater operation. Figure 2 (of your author's TR-7600) shows the push button with the label "Subtone" above it which would activate the optional PL tone board (not included in your author's particular radio). The PL tone was limited to just one frequency, but that wasn't an issue if you had only one PL-equipped repeater in

town or if all the repeaters in your area used the same PL frequency.

The TR-7600 included a basic signal strength meter, which also doubled as a power output meter. Frequency of operation was selected by first turning a switch to the correct Megahertz frequency (4,5,6, or 7 Mhz), followed by the 100 Kilohertz number (controlled by the inner VFO dial), then the 10 Megahertz number (controlled by the outer VFO dial). As an example, if I wished to use the TR-7600 on the 147.015 repeater in Auburn. IN, I would first set the Megahertz switch to the "7" position. Next, the 100 Khz. VFO knob would be set to "0", while the 10 Khz. Dial would be set to "10". Lastly, I would press in the pushbutton located beneath the "Subtone" pushbutton, allowing me to finally achieve a transmit frequency of 147.015 (assuming I had flipped the Mode switch to the "+" position for a positive, 600 Khz. offset).

2 Meter Mobile: The 1990s

By the 1990s, 2 meter mobile transceivers had reached a level comparable to the simpler, analog mobile rigs of today. As an example, the Alinco DR-130t (with production starting ~ 1994) had a maximum output power of 50 watts (according to the rig's manual) and included such features as PL-tone capability, 20 memory slots, a selectable repeater offset, and more. Weighing just under two pounds, the DR-130t was 5.5 inches wide, 1.6 inches high, and 6.1 inches deep, for a total volume of ~54 cubic inches. In total, within a 35 year period, mobile rigs had advanced from 10 pound monsters with low output power to small, two pound "wonders" packed full of features and capabilities.

Conclusion

The 2 meter mobile market has come a long way in terms of features in the roughly 60 years of time that have passed since the Heathkit HW-20 of 1961. Mobile radios have become lighter, smaller, and contain many more capabilities than their early predecessors. Still, the older 2 meter mobiles served their original purpose of getting hams on the 2 meter band, and they continue to serve today as reliable backups to our modern rigs.

73 de Jim, AC9EZ



July 2021

It was a cloudy and in-betweenthe-rains kind of Sunday afternoon. The Fort Wayne Radio Club's July Fox Hunt was about to begin from the Corbin Park trailhead parking area (the old K-Mart parking lot on Coliseum Blvd) but something was missing this time. It turns out that only one team was at the starting point! This was the team of Al Burke, WB9SSE, Jim Pliett, K9OMA, and of course the team leader, Anne Pliett, KA9YYI, YL Carole, WB9RUS. was not present this hunt, so Anne had full leadership roles!

Securely hidden in their super secret hiding place (@ 41.152851, -85.081681), the Fox team of Linda, W9LAN, Steve, W9SAN, and their grandson, Alex Smith, awaited the time that the hunt would begin (1:30pm EDT). When our iPhones told us it was 1:30, we started transmitting on the fox frequency of 146.430 MHZ FM simplex.

All seemed to be going OK. Our hiding place was city sewage pumping station located where Rothman Road and St. Joe Road



met at a 3 way stop, just north of Shoaf Park in the city's northeast side. This station is easily visible in winter when the leaves are absent from the trees, but this time of year there is almost no clue that the station is located just 50 feet west of St. Joe Road. We began the transmissions with 25 watts of power but quickly reduced power to 10 watts and then down to 5 watts. We assumed that the close proximity to the start point that little would be needed.

At roughly two in the afternoon, I spotted the minivan with quad antenna going past on St. Joe Road. We had been found! It seemed at first that the Burke-Pliett team had simply come straight to us, but that was not the case! They had overshot the fox and ended up on the west side to the St. Joseph River near the repeater. Then, once they got on the correct side, they went down a dead end street to our north.

Once the high power fox had been found, next came the low power microfox. Alex had hidden the microfox under a downed tree in amongst a pile of dead leaves. Jim initially went looking over near the pumping station, which included a 48 foot Rohn tower for control and communication link to the city. Al however had used his third harmonic rig and antenna to pinpoint the microfox, but Jim then physically located the microfox and thus was the first to find.

Despite the low turnout and rather quick hunt, it was a lot of fun. Our next fox hunt is happening on August first. The Burke/Pliett team will serve as the fox. So why not plan on joining us for the fun. All newbies are given a lot of instruction and assistance, even free antennas

for the asking, so let's see all of you on the first!!

The scorecard for this hunt, and the year-to-date totals are included

73,

Steve, W9SAN



FOX- HUNTER	JULY 2021 SCORE	YTD SCORE
WB9SSE	1	17.33
WB9RUS	1	15.33
KA9YYI	1	16.33
К9ОМА	2	17.33
KC9MUT	0	25.2
W9SAN	4	22
W9LAN	4	21
ALEX	4	21
K9WEH	0	8
N9FEB	0	8
KD9NIV	0	5.5
WILLIE	0	2.5
ND9C	0	4
KD9OKH	0	4
KD2TCP	0	3
KW9S	0	2
KD9QQW	0	2
N9AMT	0	1
KD9SDY	0	3
KD9QHL	0	6



SKCC at the Auburn, IN Hamfest

For the second straight year, the Auburn, Indiana Hamfest was held at the world renown Auburn Cord Duesenberg Museum. With free admission to the hamfest and museum, hundreds of visitors spent time shopping, and visiting along with viewing the vast array of vehicles at the venue. SKCC was well represented with a special booth and with over 25 members visiting. The booth was set up including a variety of keys and oscillators along with a computer (w/ internet) displaying our SKCC website. Visitors were given a tour of the many "treasures" on our website including our logging software, our sked page, mem-

bership information, along with our fine newsletter. Ed – WA9BBN assisted by Rose –KA9GKE took the leadership in staffing the booth. There was always a lot of activity there and Larry - W9FLA signed up at the booth and received #24665 the following day! Ed - WA9BBN does a phenomenal job talking with fellow hams about CW and getting them to try their fist on one of the keys on the table. One newer SKCC member, KD9MGZ, had his first exposure to a cootie. . . and he kept returning to the table to practice with it! While we took no formal picture this year, the picture here shows our booth with Jim - KD9GDY and Ed -WA9BBN standing (plus Josh – W9HT on the far right selling radio goodies at his table) with Rose -KA9GKE chatting with a visitor. We are grateful to the Auburn Club for giving us space and helping us display our banner.

73,

Ken, N8KR



AS SEEN AT THE



AUBURN HAMFEST

JULY 10, 2021
PHOTO COURTESY OF DAVID, N9FGP



Cincinnati Hamfest



2021 Cincinnati Hamfest and W8DXCC

Saturday, August 28, 2021

Hamfest 8 a.m. to 4 p.m. W8DXCC Convention 1 p.m. to 6 p.m.

Free Parking

Food and Ice Cream Trucks Onsite

Air Conditioned Seating

Hourly Door Prizes

VE License Testing 9 a.m. to 11 a.m. FRN Required (Registration: https://CincinnatiHamfest.org/license-exams)

The <u>Eastside Vendors/Crafters</u> will be onsite during our event. Be sure to bring other friends and family so they can enjoy both events! The craft show is FREE to the public

Clermont County Fairgrounds 1000 Locust Street Owensville, OH 45160

Pricing details and reservations: CincinnatiHamfest.org

VHF 147.345+ (CTCSS 123.0) Primary UHF 443.450+ (CTCSS 123.0) (Both repeaters FM and C4FM capable)



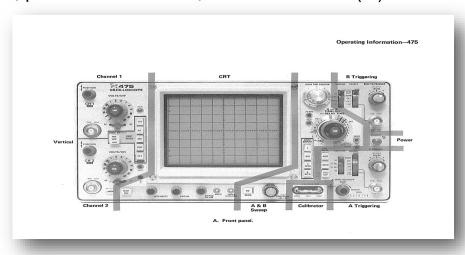




For sale and wanted listings in this section are provided to members of the Fort Wayne Radio Club, the Allen County Amateur Radio Technical Society, the Fort Wayne DX Association, and to other local hams free of charge! Listings can be renewed upon request to the editor (see pg. 2 for contact information).

 Tektronix 475 Oscilloscope. Wide bandwidth, portable oscilloscope, light in weight and compact in design. Two channels driving two separate beams, each with a 200 MHz bandwidth and with separate triggers. Includes two probes. \$125.00

For this item, please contact Kevin, N9IWW at n9iww (at) live.com.



- Cushcraft ARX-2B 2 meter Ringo Ranger II 7 dB gain omnidirectional antenna. Good condition, but missing one of the three 20" ground radials. \$40
- Cushcraft AR-6 6 meter Ringo Ranger 3 dB gain omnidirectional antenna. Fair condition worked fine last time it was used. \$20
- Siltronix FS-301 HF SWR Bridge/Watt Meter \$35
- Drake TV-100 30 MHz low pass filter 100 watt \$4
- Maha MH-C800S NICAD charger (holds 8 individual AA cells) \$5
- DLINK DES-1108 8-port 100 MB/s ethernet switch \$5
- Book: Amateur Antenna Tests and Measurements by Harry Hooton W6TYH -\$2
- Book: Microwave Transistor Amplifiers Analysis & Design by Guillermo Gonzalez - \$2
- Book: Transmission Line Transformers by Jerry Sevick W2FMI \$2

For any of these items, please contact Don, WB8HQS at don.gagnon (at) frontier.com or text to 260-403-1548.

For Sale / Wanted Continued

- Drake L-4B amplifier with L4PS and original manual. Amp has been gone through electrically and the power supply was upgraded with a new control board and caps from the Heathkit Shop in 2016. Cosmetics are excellent. Wired for 220VAC and includes cable with locking plug. Tested into dummy load on 80 meters. \$1100.00
- Drake TR-4 Transceiver. Gone through electrically. Cabinet has been professionally repainted, however, the nomenclature defining the plugs and adjustments on the lower cabinet were not finished. Tested into dummy load on 80, 40 and 20 meters with full output. Receives well on all bands. Comes with an original manual. \$350
- AC-4 power supply. Upgraded in 2015 with new board and caps from the Heathkit Shop. Tested along with the TR-4.. \$150
- MS-4 speaker. Good condition with some normal cabinet ware. \$125
- Vibroplex Standard Vibro Keyer. Good shape with cable and Drake plug installed. \$125
- Heil Classic 5 Studio Microphone. Excellent shape in original box. \$150
- Heil foot switch. \$20
- Collins 30L1 Solid state relay driver kit. \$10
- HiRes Communications P-1 "pecker" kit \$10
- HiRes Communications PDC-1 Peak Reading mod kit \$10. All three are original with documentation and appear complete. Sell all three together for \$25
- Drake R-4C receiver. 23K serial number. Just back from refurbishment by Ron Baker WB4HFN. His repair work record is included with the receiver. Includes 1.5 and .5 filters, 160 meter crystal, all 10 meter crystals and several SW listening crystals. Beautiful receiver. \$400

For any of these items, please contact Mike Stover, N9QR at n9qr (at) arrl.net or call 260-602-6193.

Your item could be listed here next month! Just send the editor an email with your listings before August 30th. See page 2 for contact information.

For Sale / Wanted Continued

All items from this listing are from Lester Lee, KA9LTP (SK) for his wife, Tammy.

- FT-1030A Yaesu Power Supply, 30A peak, 25A continuous. "Low Mileage". Asking \$150 each.
- Astron 35A Power Supply, no meters. Asking \$125.

For any of these items, please contact Jack, W9OWO at 269-585-0408.

- 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







Your item could be listed here next month! Just send the editor an email with your listings before August 30th. See page 2 for contact information.

Radiosport

Selected Contest Ca	alendar for August 2021
SKCC Sprint Europe	1900Z-2100Z, Aug 5
10-10 Int. Summer Contest, SSB	0001Z, Aug 7 to 2359Z, Aug 8
European HF Championship	1200Z-2359Z, Aug 7
SKCC Weekend Sprintathon	1200Z, Aug 7 to 2400Z, Aug 8
North American QSO Party, CW	1800Z, Aug 7 to 0559Z, Aug 8
WAE DX Contest, CW	0000Z, Aug 14 to 2359Z, Aug 15
Kentucky State Parks on the Air	1400Z-2200Z, Aug 14
Maryland-DC QSO Party	1400Z, Aug 14 to 0400Z, Aug 15
North American QSO Party, SSB	1800Z, Aug 21 to 0559Z, Aug 22
SKCC Sprint	0000Z-0200Z, Aug 25
Hawaii QSO Party	0400Z, Aug 28 to 0400Z, Aug 30
World Wide Digi DX Contest	1200Z, Aug 28 to 1200Z, Aug 29
W/VE Islands QSO Party	1200Z, Aug 28 to 0300Z, Aug 29
Kansas QSO Party	1400Z, Aug 28 to 0200Z, Aug 29 and 1400Z-2000Z, Aug 29
Ohio QSO Party	1600Z, Aug 28 to 0400Z, Aug 29
This information comes from the	WA7BNM Contest Calendar at contest-

calendar.com and is gratefully acknowledged.

			Area I	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 Traf- fic Net	8:00 PM	50.580 USB	FWRC 6-Meter SSB Net
6:00 PM	3.940	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 146.760)	Wednesday		
7:00 PM	147.015+	Tri State Two Me- ter 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.

^{5.} Indiana HF Traffic Nets Web Site: http://www.inarrl.org/index.php/public-service/indiana-nts

	Fort	Wayne	area repeat	ers (update	d as of 5/1	/21)	
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	444.250	+5 MHz	141.3	W9AVW
224.780	-1.6 MHz		W9FEZ	444.8750	+5 MHz	141.3	W9TE
				53.3300	-1 MHz		W9FEZ

Update: The 146.91 W9TE repeater is currently off-the-air as of 8/1/21.

^{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.



Save the date!

FORT WAYNE HAMFEST

November 13-14

	FWRC Membership Application	
Name:	Call Sign:	
License Class		
Street address:	Citv [.]	
State: 7IP·	Phone #:()	
Email address:	City: Phone #:() ARRL Member?	
(ARRL membership helps the club mainta	ain ARRI affiliation)	
,	ess in our membership roster & on our club web site?	
way we list your name, oall a omali addre	33 III our membership rester a on our out was site:	
Fort Wayne Radio Club dues:		
Regular membership	\$20.00 / year	
Family membershin ¹	\$30.00 / year	
Student membership ² Associate membership ³	\$5.00 / year	
Associate membership ³	\$20.00 / year	
(Memberships for July-December are ½ tl	he stated amounts)	
(Memberempe for early Becomber and 72 a	no statou umounto)	
Please attach a check to this form (naving	g by check is strongly encouraged) made out to:	
) 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.	attached sheet.	
Unlicensed member.		
Officerised member.		
	ACARTS Membership Application	
Name:	· · · · · · · · · · · · · · · · · · ·	
Name:License Class:	Call Sign:	
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