

Allen County HamNews

Fort Wayne Radio Club Fort Wayne DX Association

Allen County Amateur Radio Technical Society

November 2022

Volume 23

Issue 11

SPECIAL 2022 HAMFEST EDITION

ALLEN COUNTY HAMNEWS
NOVEMBER 2022

HAMFEST HAMFEST HAMFEST HAMFEST



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community!



<http://acarts.com/hfmain.htm>
Fort Wayne Hamfest 2022

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Hamming It Up With the Editor

November is here, as is the countdown to the 2022 Fort Wayne Hamfest.

Hamfest 2022

Please see the various articles and graphics in this edition of the HamNews for information about the Hamfest. The success of this year's Hamfest depends on support from as many local hams as possible. Your support can involve getting a swap table, volunteering, attending, or spreading the word.

W9HT/VY2

Last month I made a trip to the Maritime provinces of Canada for fall break. (I lived in this part of the world for a few years during grade school, so I wanted to retrace part of my earlier years.) After checking out the village of St. Paul, New Brunswick, I spent the better part of a Sunday afternoon operating from the VY2TT contest station on the northern end of Prince Edward Island. I spent about 4 hours of calling CQ on 15m and 20m and thoroughly enjoyed the pileups that replied. Being the DX is always a thrill. I will try to write a longer column about this escapade in next month's edition of HamNews.

Now, I have to wait for my QSL cards to come and to spend a weekend addressing cards for the outgoing QSL bureau!

Giving Thanks

The Thanksgiving holiday will be here in just a few weeks. Aside from enjoying the best hobby in the world (amateur radio), there is much to be grateful for in life.

Thank you to each of the contributors and authors who make this publication possible.

To the readers, I wish you and your families a very happy Thanksgiving holiday.

73,

Josh, W9HT (sometimes portable VY2)



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

2022

**FORT
WAYNE
HAMFEST**

**ALLEN COUNTY
MEMORIAL COLISEUM**

November 19 & 20



**ALLEN
COUNTY**

ARES Operations and Situational Awareness

By Brian Kibiger, AC9XU, AEC

Situational awareness is a critical part of a successful ARES Operation. Time, severity, and accuracy are just a few things an ARES radio operator must consider during an event or activation. Therefore, the skill of situational awareness must be developed just like the skill of radio operations, safety awareness, and overall preparedness. Taking the time to be situationally aware sets the ARES operator apart as someone who is fully aware of what is going on around them.

Definition

Situational awareness is **knowing what is going on around us**. It involves drawing a kind of mental map that helps us understand where we are, what surrounds us and what are the challenges that lie ahead. This ability allows us to see clearly what is happening to develop an effective coping plan (Source: <https://psychology-spot.com/situational-awareness/>)

Key Development Points

1. **Stay in the moment** – During a long or short

event, the ARES radio operator can experience many different distractions. People, surroundings, and malfunctions are just a few things that can take an operator mentally away from the job at hand. It is critical to stay alert and aware of what is going on to avoid routine or tunnel vision, both of which distract from being in the moment.

2. **Get as much information as possible** - As the operator develops the skills of situational awareness, he/she must learn to use all their senses to gain the full picture of what is going on around them. Because information is constantly changing, the practice of using the senses for data collection must change as well. If an operator only gets part of the picture, then there is a possibility for unclear or faulty information for an action plan.
3. **Understand the gathered information** – Radio operators are tasked with the important responsibility of passing sensitive, accurate and time-oriented information. Therefore, the radio operator must fully understand information they are processing so that the receiving party is fully aware of the situation, crisis or needs at hand. This is the time when the radio opera-

tor must process all the data collected

3. **Think ahead** – Once radio operators have the data, understand the data, and are in the moment, they now must think ahead to develop a mental map or action plan. Thinking ahead requires the radio operator to step out of the repetitive routine and engage to determine how best to incorporate any new information into the action plan. Taking a moment to think ahead gives the operator time to build a concise message, process a clear plan, and articulate a clear message.

Summary

Situational awareness is a discipline that requires the ARES radio operator to stay in the moment, gather and understand information, and think ahead. Being fully aware of what is going on forces the operator to put aside distractions, mind numbing routine and seek to be completely aware of their duties and how they affect those served. Situational awareness sets up the ARES radio operator to lead with excellence.

Hamsplatter

Fort Wayne Radio Club

P.O. Box 15127, Fort Wayne, IN



Holy cow! The cold months are upon us. This is not my favorite time of year, but I will survive.

I think we all enjoyed last month's presentation on the MaMaJoe's Deep Rock Tunnel Project. An amazing operation. This month's discussion will be provided by Adam Warrix, KD9NRT. He will be talking about DXCC on satellites. It sounds like an interesting topic.

And we will be back in Raush Hall. We will definitely have more elbow room in there!

Coming up in a few short weeks is the Fort Wayne

Hamfest. If you aren't already volunteering, I'm pretty sure there are a few jobs to fill. Ask anyone in the club to point you who to talk too. Yes, it's a bit of work, but it's fun and you can have a chance at meeting new people too.

See you Friday, November 11th at 7:00pm at the Good Shepherd United Methodist Church (across from Snider High School) for our next club meeting.

73,

Carole, WB9RUS

FWRC Activities for 2022		
Foxhunts	Board Meetings	Club Meetings
11/6/2022	11/8/2022	11/11/2022
--	11/29/2022	12/9/2022

FWRC Officers 2022
<p>President Carole Burke, WB9RUS (260) 637-1989 wb9rus(at)comcast.net</p>
<p>Vice President Paul Prestia, KA3OPZ (260) 485-9632 phixer(at)gmail.com</p>
<p>Secretary Al Burke, WB9SSE (260) 637-1989 aburke55(at)comcast.net</p>
<p>Treasurer Bob Streeter, W8ST</p>
<p>Communications Manager Charles Ward, KC9MUT (260) 749-4824 kc9mut(at)yahoo.com</p>
<p>Directors Steve Nardin, W9SAN (260) 482-4039 w9san(at)arrl.net</p>
<p>Clark Derbyshire, KG9FM (260) 615-1762 cderbyshire(at)comcast.net</p>
<p>Terry Bowman, K9FMX (260) 705-7128 tjbowman(at)frontier.com</p>
<p>Larry Temenoff, KB9OS</p>
<p>Newsletter Editor Josh Long, W9HT</p>

FORT WAYNE RADIO CLUB MEETING MINUTES

21 October 2022

The October meeting of the Ft. Wayne Radio Club was held at the Good Shepherd United Methodist Church (GSUMC) on 21 October, 2022.

President Carole Burke, (WB9RUS) welcomed all attendees (about 60) and led them in the pledge of allegiance.

Treasurer Bob Streeter, (W8ST) provided data regarding the current club Treasury status as of 21 October, 2022, to wit:

Savings-	\$1,964.51
Checking-	\$6,064.85
Vanguard Money Market	\$11,402.44
Year-To-Date Income	\$1,912.03
Year-To-Date Expenses	\$3,078.51
Club members count	154
Prepaid for 2023	3

Elections for the 2023 FWRC Officers and Board of Directors included an actual vote by ballot for three Board of Directors positions. There were only one candidate each for the positions of President, Vice President, Secretary, Treasurer and Communications Manager so these positions were elected by acclamation and are as follow:

- President
Larry Temenoff, KB9OS
- Vice President
Josh Long, W9HT
- Secretary
Al Burke, WB9SSE
- Treasurer
Bob Streeter, W8ST
- Communications Manager
Charles Ward, KC9MUT

Those running for three Board of Director positions included:

- Bill Hopkins, K9WEH
- Steve Nardin. W9SAN
- Carla Barrett, KD9ITZ
- Terry Bowman, K9FMX

And the winners were:
Steve Nardin. W9SAN
Carla Barrett, KD9ITZ
Terry Bowman, K9FMX

Outgoing President Carole Burke, WB9RUS will automatically fill the fourth Board of Directors position.
A big thank you goes out to Jack Shutt, W9GT and Jim and Kim Machamer, KB9's DOT & DOS who distributed and counted the ballots.

Steve Nardin displayed images for the FWRC decal designs received to date, and for the Foxhunter decal design that will be made available to our Foxhunters. The FWRC decal design will be chosen at the next Board meeting and decals will be procured in time for the Fort

Wayne Hamfest where they will be given to everyone re-upping their membership dues during the Hamfest

The program for October included a presentation on the MaMa-Joe Tunnel Boring project managed by Fort Wayne City Utilities and given by Mike Kiester, City Utilities Manager of Construction and Tunnel Project Manager. Mike provided a wealth of information on the reason behind this rather large construction project which is creating a five mile long, sixteen foot diameter tunnel 200 feet through granite below Fort Wayne for the purpose of waste water control.

The meeting concluded about 8:45 pm.

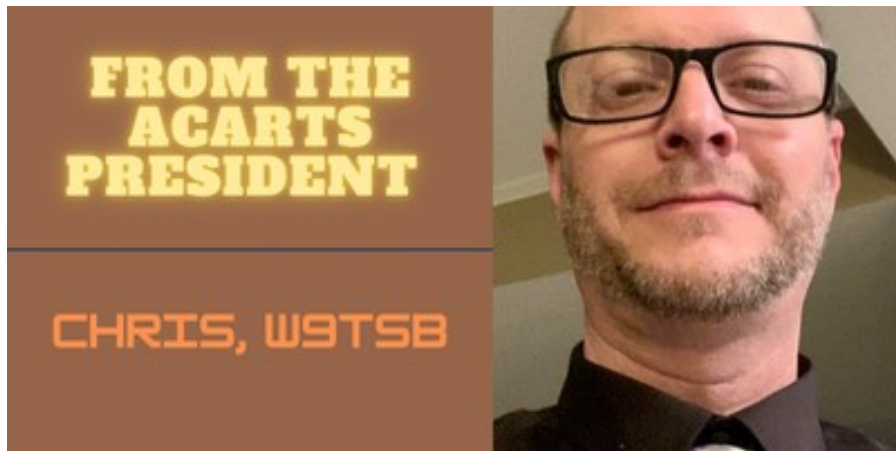
Respectfully submitted,
Al Burke, WB9SSE

Secretary, Fort Wayne Radio Club

State of the Arts

Allen County Amateur Radio Technical Society

P.O. Box 10342, Fort Wayne, IN



Hello everyone!

Currently, the ACARTS membership is in full Hamfest mode. Our next couple of meetings are going to be focused on that. Also, we have club elections are around the corner from the Ham fest.

We still have the Secretary position open on the ACARTS board. If anyone is interested in being a part of our board, please email me at w9tsb (at) outlook.com.

Our November general meeting will be another Hamfest prep meeting. This will be a virtual meeting on Zoom. The link will be posted on the ACARTS website at www.acarts.com about a week or two before the meeting. Those that wish to help with the Hamfest are welcome to join the meeting.

Thank you, all!

73,

Chris McCullough, W9TSB

ACARTS Officers 2022

President

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

Vice President

Jim Boyer KB9IH
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Secretary (open)

Treasurer

Howard Pletcher N9ADS
260-747-5252
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Station Manager

Jim Sampiere KD9NPL
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Kd9npl(at)gmail.com

Fundraising Manager

Fred Gengnagel KC9EZP
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Directors at Large

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

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k9sks(at)aol.com

Dan Dahms N9NWH
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n9nwh(at)arrl.net

W9INX Trustee

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

50th FORT WAYNE HAMFEST & Computer Expo



ARRL Forum - Saturday 10:00 AM

Carl Luetzelschwab K9LA
ARRL Central Division Director

Brent Walls N9BA
ARRL Central Division Vice – Director

Bob Burns AK9R
ARRL Indiana Section Manager

Jim Moehring KB9WWM
ARRL Indiana Section Emergency
Coordinator

November
19 & 20
2022

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)

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

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



50th Fort Wayne Hamfest!

Attention Hams and Non-Hams

If you didn't know or forgot, the 2022 Fort Wayne Hamfest is just a few short weeks away.

We are working on making this year great and need your help in spreading the word about our hamfest. Like with many events, volunteers make an event great and this hamfest is no different. If you can volunteer for any amount of time, please contact us and we will get you on the list.

There will be many awesome forums on Saturday, with ARRL representatives, people who are making this hobby great and even Riley Hollingsworth (K4ZDH) will be attending with a forum on Resurrecting Vintage Equipment with Carl Luetzelschwab (K9LA).

Again, mark your calendars for Nov 19th (9am to 4 pm) & 20th (9am to 2pm) and get your shopping list together for those must have items. If you're one that might

have too much, don't forget that we have tables available for selling to make room for the new items that you just can't live without.

If you are looking to become a new ham or upgrade your exciting license, we will have testing on Saturday for 9am to 12pm. Here is the link to preregister and to make sure that you have all your documents in order before you arrive:

<https://hamstudy.org/sessions/6305841de34cc55fa05616aa/1>

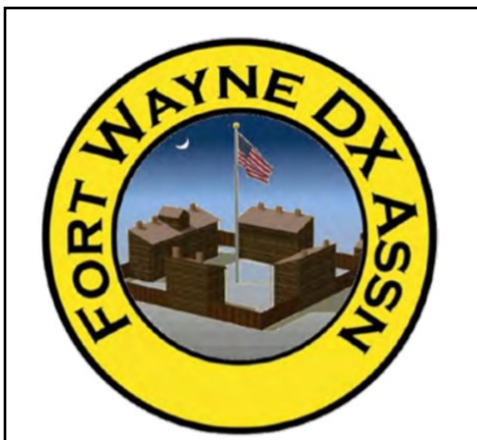
Head over to the 2022 Fort Wayne Hamfest webpage for all your information needs and contacts:

<http://www.acarts.com/hfmain.htm>

We look forward to seeing you at the 2022 Fort Wayne Hamfest and Computer Expo

Fred Gengnagel, KC9EZP

Hamfest Chairman



The Low Bands as Cycle 25 Ascends

By Carl Luetzelschwab, K9LA

I hope you've been enjoying the improved propagation on the higher bands (15m, 12m and 10m) as much as I have. The fall months certainly help the higher bands – couple that with Cycle 25 continuing its ascent (although somewhat slowly), and we can have all kinds of fun. It will be interesting to see the claimed scores for the CQ WW DX PH contest at the end of October (it will be over when you read this).

What about the other end of the spectrum – the low bands (160m and 80m)? How will they do in the CQ WW DX PH contest? In The ARRL Antenna Compendium Volume 5 (1996), Dean Straw, N6BV, had an interesting poetic comment in the lead-in to his article titled “The N6BV 75/80-Meter Quad.” He said: *The low bands get hot when the sunspots are naught.*

What that means is it is generally believed that the low bands are best at solar minimum when there are few sunspots (less D region absorption and fewer geomagnetic storms to disturb the ionosphere). And the low bands are worse at solar maximum when there are many sunspots

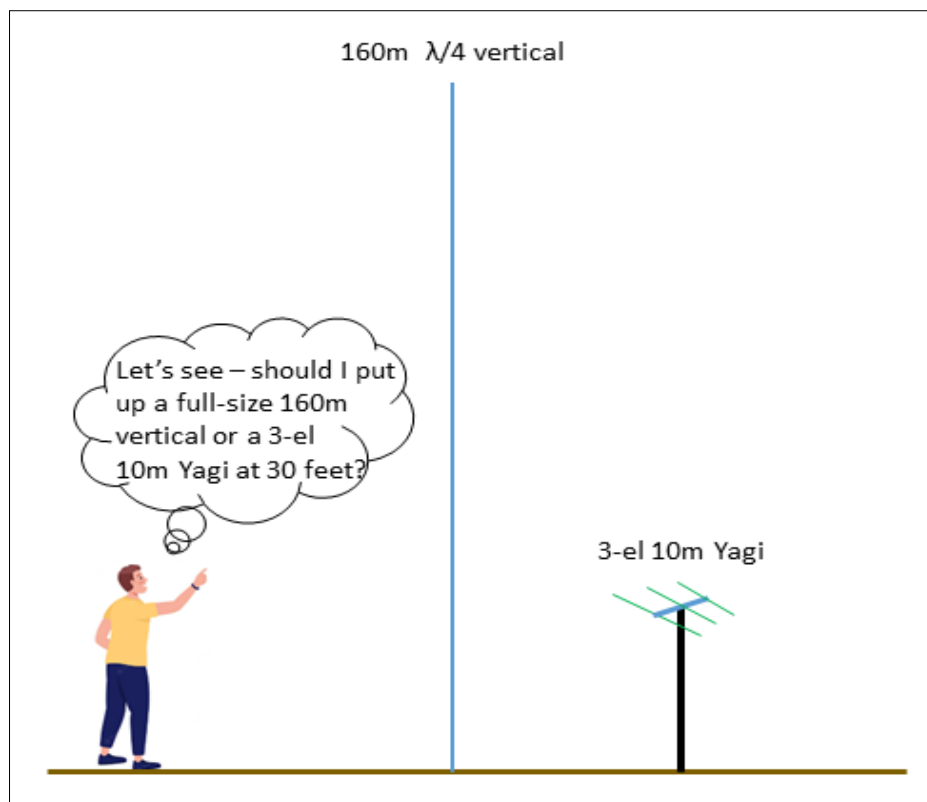
(more D region absorption and more geomagnetic storms to disturb the ionosphere). The September column showed the progress of Cycle 25, and it appears that we are about halfway to solar maximum. In other words, we're kind of in between solar minimum and solar maximum.

With respect to the low bands, I'll go out on a limb and predict that CQ WW DX PH and CQ WW DX CW in late November will have decent propagation on the low bands. I said 'decent', not 'great', because during the last solar minimum 160m and 80m just didn't seem to be as good as many expected.

I'm of the opinion that solar minimum between Cycles 22 and 23 (roughly 1995-1997) had excellent propagation on 160m. The next two solar minimums, between Cycles 23 and 24 (roughly 2007-2011) and between Cycles 24 and 25 (roughly 2017-2021), weren't as good. Why was that?

I can think of several possible explanations for this: older top-banders becoming Silent Keys, new hams not willing to embrace the difficulty of 160m (see the accompanying image), a physical issue tied to the fact that solar minimums are not all the same (the last two solar minimums were much deeper and longer than the solar minimum between Cycles 22 and 23) and the fact that global warming (which is at ground level and results in global cooling at ionospheric heights) may be doing something to the ionosphere. And don't forget the explosion of FT8 (which began in mid 2017), which many hams appear to favor over CW and SSB on the low bands. So there may be a human factor or a physical factor or even a combination of the two that has made 160m less productive in recent years.

Regardless, I will be on 160m and 80m in the contests trying to have fun. I hope you join in.



Tuning Up

Serial Number Decoding: Rig Sleuthing Part 2

November is officially here, and with November comes a new edition of the HamNews and the ACARTS Hamfest! After the craziness of the last couple of years, it is a real joy to be able to look forward to regularly scheduled events like hamfests, and the Fort Wayne Hamfest is no exception. This year is extra special as the Fort Wayne Hamfest will serve as the ARRL's Central Division Convention. So, I encourage everyone who has the time and inclination to make a trip out to the hamfest and enjoy the fellowship and excitement that only a hamfest can bring (at least to ham radio operators!)

As promised in last month's column, this is part two of the series on reading manufacturing dates of radios from their serial numbers. In this month's column, we will take a look at the serial numbers on transceivers produced by Icom and Kenwood. As always, much of this information necessarily comes from online research, so "mileage may vary." Chances are that if multiple sources agree on a fact or statistic, then at least some grain of truth will be found in those sources.

Icom's Numbering Practice

After spending some quality time on the worldwide web, the search for "hidden meaning" in Icom transceiver serial numbers has returned surprisingly disappointing results. Multiple websites (including Facebook and other forums) have users posting comments that Icom radios do not have any meaningful manufacturing information within their serial numbers. One commenter on a forum (posted in 2004) mentioned that Icom ceased including such information in their serial number "a few years ago."

To me, the above comment implies that perhaps Icom at one time did include manufacturing dates within their rigs' serial numbers, but if so, the technique in how to read that information is not publicly well known



Image 1: An Icom IC-7300. Photo courtesy of Dick Wendell, K7ULM.

Icom Workaround?

There is one tried and true technique for getting an approximate manufacturing date of rig serial numbers, and this technique is, surprisingly, mentioned more commonly among owners of Icom receivers. The same technique should translate easily to transceiver owners.

The idea is to start with a known date of purchase of a brand new, off-the-shelf Icom radio. That brand new rig will have some kind of serial number. Since manufacturers are more likely to increase the serial number of radios (as the number of radios produced increases), it stands to reason that a "higher" serial number on a radio would mean a later production radio.

Here's an example. Suppose ham A bought a brand new Icom IC-746Pro in 2003 with a (fictitious) serial number of 020020. Ham B also buys an Icom IC-746Pro, with a serial number of 023020. Using the above logic, it can be assumed that ham B's '746Pro was produced either on or after the year 2003.

The key here is that some ham must own an Icom radio of the same make and model as the Icom radio in question, and that ham must know when the original radio was sold. It can be seen that the more radios bought new (with corresponding dates of purchase) will make the process easier, with more dates by which to characterize the Icom radio in question. Although not a precise system, this appears to be the closest one can come to a manufacturing date for a given serial number short of calling Icom directly and asking for a manufacture date of a particular radio.

One other thought while we are on the subject of Icom transceivers. A different solution for dating a particular transceiver is to open the lid of the transceiver and look for any dates on the circuit boards or components inside the rig. As one commenter mentioned, the date of manufacture for the radio is probably close to the date labeled on the components. This of course means physically opening the rig's case, which if you are intending on buying a rig online is impossible.

Kenwood's "Code"

Kenwood transceivers are another enigma, and the internet is less than conclusive in the subject of radio manufacturing dates. Once again, the best one can do is to look for common themes or methods of determining manufacturing dates.

I cannot find a method for determining the manufacturing date from the serial number that will apply to all Kenwood transceivers. One posting on a groups.io page has a posting using information from a Kenwood manual for the Kenwood TS-990s (one of the higher-end radios in the amateur radio market). This method of reading serial numbers appears to only work for Kenwood transceivers produced after the year 2000.

Briefly summarized, the first three digits of the serial number represent respectively; the decade, the year, and the month the rig was made. Several examples are provided to illustrate the system. Here is the link to that groups.io posting.

<https://groups.io/g/TS-990S/topic/>

[kenwood 990 serial numbers/61959221?p=](https://groups.io/g/kenwood-990-serial-numbers/61959221?p=...)

There does appear to be some information online regarding older Kenwood transceivers, but it is hard to say conclusively whether the techniques mentioned on these other websites will work 100% of the time. A vigorous discussion on a groups.io page discusses the efforts Kenwood TS-940s owners have undergone to determine the manufacturing date of their '940s rigs, but even then there appears to be some debate as to exactly what the serial numbers mean. For the interested reader, the weblink to that discussion follows. https://groups.io/g/kw-ts940s/topic/ts_940_7_xxx_xxx_mfg_date/77652980?p=...20,0,0,0::recentpostdate%2Fsticky...20,2,20,77652980

Just for grins, I checked to see if any information existed on the venerable Kenwood TS-520s (a classic Kenwood radio for today's amateur). To my surprise, the first hit off the all-knowing Google was a pdf of a list of Kenwood TS-520s transceivers. The list includes the date of purchase of TS-520s transceivers, the callsign of the owner, and the serial number of the '520s. Also included for some transceivers is the retail location that sold the transceiver. Included is the link to that list. <http://www.wb4hfn.com/KENWOOD/Articles/Serial%20Number%20DB-02.pdf>

In summary, it appears that of the "big three" radio manufacturers (meaning Yaesu, Icom, and Kenwood), only Yaesu has a unique and established system for reading manufacturing dates from rig serial numbers. What does this mean for the amateur consumer? If one is buying a Kenwood or Icom transceiver, the serial number is probably just a plain old serial number (or is it?)

73 de Jim AC9EZ



October 2022

The October Foxhunt occurred on Sunday 2 October, 2022. The plan had been that Al Burke, WB9SSE would serve as the fox while Jim & Annie Pliett, K9OMA & KA9YYI, and Charles Ward, KC9MUT would serve as the two foxhunter teams. Steve and Linda Nardin, W9's SAN & LAN were supposed to be the fox but family commitments made it impossible for them to attend.

Then, as it turned out, Al Burke wound up in the hospital prior to the foxhunt weekend and didn't get out until October 3rd so neither he (nor Carole) could participate. So Jim and Annie served as the fox and they were hunted down by Charles (& his ride-along foxhunting mate Angie). Despite these hiccups, the fox-hunt went on!

Jim and Annie hid the microfox at the Allen County Fairgrounds (off Carroll Rd. and about two blocks north of Al & Carole's QTH). They placed the microfox inside the top rail of the northern end of a chain link fence that ran north-south along the west side of the main 4-H building. It dutifully beeped out about a 100 mw cw signal on 146.430 MHz every 2 ½ minutes. They also radiated the high power fox signal every five minutes starting at 13:30 hours interspersing it with the microfox emissions.

Charles (and his foxhunting mate Angie) heard

the fox from their starting location at the 24/30 Surplus location just north of Corbin Memorial Park. They wound their way north and finally localized the fox about seventy minutes after the hunt started. As it turned out Angie located the micro-fox first but did not indicate so to Charles and he wandered around the area until finding the microfox himself.

Following the hunt everyone zipped over to Mr. Coney off Coldwater Rd. for a well earned re-past.

The scores for this hunt and year-to-date totals are as follows

FOX-HUNTER	OCTOBER SCORE	YTD SCORE
WB9SSE	0	4
WB9RUS	0	4
KA9YYI	1	3
K9OMA	1	3
KC9MUT	1	14
ANGIE	2	2
W9SAN	0	8
W9LAN	0	6
ALEX	0	10
KD9TST	0	2
KD9TTK	0	2
KD9TTL	0	2
IAN	0	2

The next (and final) hunt of the year will occur on November 6th and will feature Charles (and perhaps Angie) as the fox. Why not mark that date down in your calendar and join us?

73,

Al, WB9SSE

**JOIN THE LAST
FOXHUNT OF
THE YEAR ON
SUNDAY,
NOVEMBER
6TH... OR YOU
WILL HAVE TO
WAIT UNTIL
2023. JOIN THE
FUN!**

10 Meters Is Open . . . Do You Have an Antenna? De N8KR

Over the course of the past two weeks, the 10 meter band has been alive throughout the day and into the evening. This past weekend saw the phone band filled with DX during the CQWW contest. I spent some time on Saturday morning looking for a clear space to call CQ. I started looking at 28.300 and it wasn't until I got to 28.630 before I found a spot! The DX did not end there as I saw stations at 28.800! Having a Yagi made making DX contacts easy.



Image: Ye olde CB aerial in service on 10m

I wondered what it would be like with a mobile CB antenna. With 50 watts I was able to work Spain, Italy, and Germany. While it required a few calls, the fact that this antenna worked reminded me how easy 10 meter contacts can be when the band is open. While I don't advocate putting up a mobile CB antenna in your backyard 2 feet above the ground as being ideal, the simple fact that an antenna like this can work. Put it on your car and go mobile! And if you are really serious about 10 meters, read on about the ZL!

The ZL Antenna –An Easy Build With Gain

I was first introduced to the ZL antenna back in the 80's. While there are many variations on this design, the one that was suggested to me (thanks, K8AQM) is the one I will lay out for you here. While this will be a 10 meter antenna, it can be built for any band. (I built one for 160 meters, hung it off of my 100 foot tower, and worked 100+ countries with it!) The design is simple: 2 sloping half wave dipoles cross phased with 1/8 wave 300 ohm twin lead. For this 10 meter

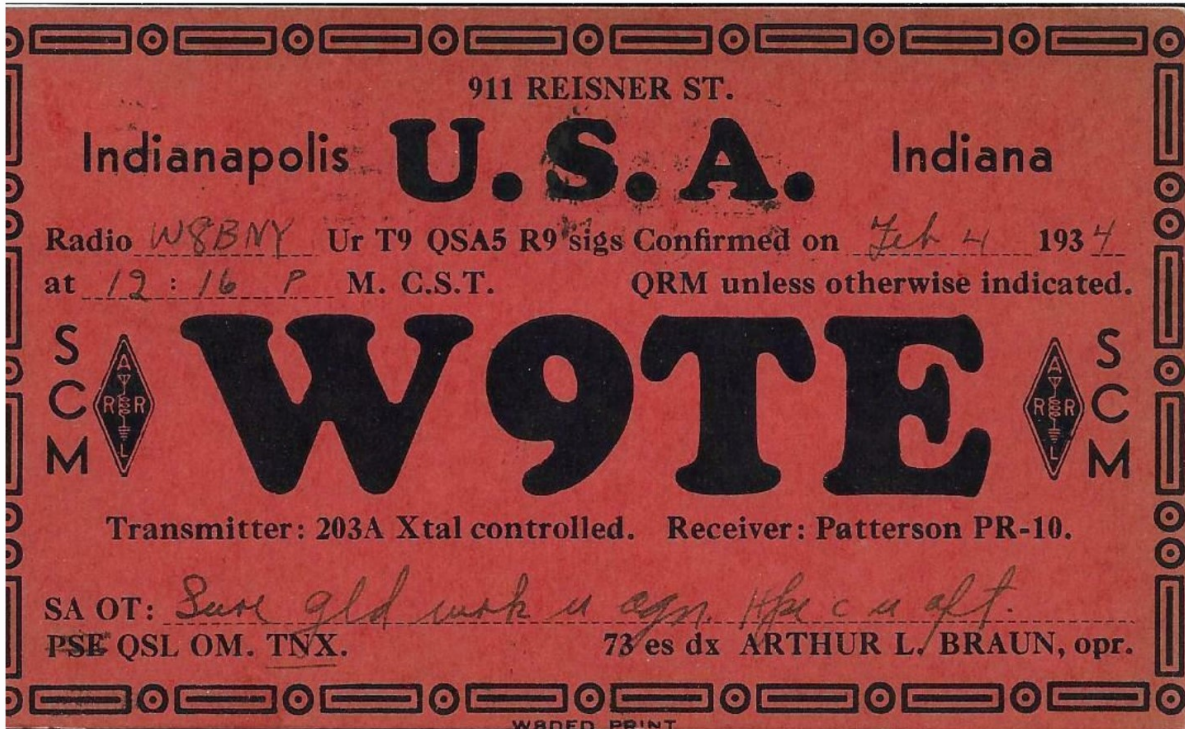
ZL, I measured two 8'3" lengths of wire for the "driven" sloping dipole (see picture – the leg on the right with the short coax connector) and 9'1" lengths for the reflecting sloping dipole seen on the left. I then cut a 4'2' length of 300 ohm twin lead for the phasing line. When connecting the two sloping dipoles, I twisted the phasing line so that the top end of each dipole is connected to the adjacent bottom leg. I attach the top of the antennas to a 2' piece of wood.



Taking a close look at it in the air, I have it hanging from a 17 foot high temporary mast. I used my MFJ antenna analyzer to adjust the antenna for resonance in the 10 meter band. I found I needed to shorten it a bit. SWR here in the shack was 1.2 – 1.7 through the band. (This was built for W9HT and when he put it up, the swr was 1.6) Test results here, and I might add that I had the antenna pointed west and not east, found Europe DX about 2 s units lower than my yagi which was pointed at Europe and at 45 feet! Lots of DX contacts were made with it before taking it down and installing it at Josh's. I should note that I have found that it is somewhat directional with the reflector element, but it also favors the direction of its slope. It's a great antenna that, on 10 meters, takes up about 18 feet! I've used this ZL antenna on 40, 20, and 17 meters along with my 160 meter ZL while living in Ohio. Simple design, great results. Antenna building is fun!



WANTED



DIGITAL OR HARD COPIES (TO BE
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RADIO CLUB NEWSLETTERS PRIOR
TO JANUARY 2004

Contact Bob , W8ST at
rdstre (at) yahoo.com

A Request for Help: A CW Beacon for 10 GHz

The Original Request

I am in need of some help and was wondering if you might be able to assist.

I have spent 5-6 months and close to \$800 to build a CW beacon for 10 GHz. It features a 3W DEMI SSPA driving a 8-slot omni directional antenna. Everything is self-contained in a commercial "white box" enclosure.

The entire unit is about a cubic foot in volume. I need to find a nice high vantage point to mount the beacon. Something around my QTH or Ft. Wayne would be ideal. I am working with several other uw'ers in the Midwest and our 3 beacons will provide a huge service to the uW community. One is located at MSU ARC in Michigan, the other is near Cincinnati, Ohio on a 140' ATT long-haul uW tower, and mine is looking for a home.

The beacon has a GPS based 10 MHz reference to ensure the beacon will serve as a frequency standard as well as provide propagation signals and a known bearing for many, many ops within 300 miles. Can you help me ask around? TU es 73

Gedas W8BYA The Plot Thickens

Hi Steve (W9SAN). Thank you very much for reaching out to me. I am thrilled that we may have some possible help available with this project.

For the 10 GHz beacon to serve the Midwest uW community most effectively we need to ensure that the antenna have a clear, unobstructed view in all azimuth directions for a radius of about 1/2 mile.

At 10 GHz foliage is a huge RF absorber. The beacons signal, if having to pass through even one healthy green leafed tree is enough to render the beacon signal almost completely useless in the direction of the tree canopy.

Likewise, obvious obstructions such as tall buildings or hills etc. will directly stop the RF from propagating.

The antenna does not have to be high (in an absolute sense) to be effective, it just needs to have a clear shot around its immediate surroundings. For example, my small 2', 10 GHz dish is mounted on a short 60' tower and I am surrounded by a lot of trees in almost most directions. But, the key is that the dish is at or just above the majority of the tree tops within the 1st several thousand feet. This has allowed me to make some very exciting DX contacts.

The beacon is almost finished but not knowing where it will be mounted I held off incorporating the power supply portion. If 110VAC is available then I can incorporate a small AC-to-DC PS inside the white box. If a good clean 13.8 VDC (at ~3A) power source is available then I can put that to use.

As an example of how flexible the antenna height can be consider that probably 95% of the 10 GHz contacts made are from folks running their dish on a tripod 4' off the ground. The key is they pick areas where their RF has a clear shot to the horizon and allows them to work gobs of stations.

I hope this helps. If you have any questions at all, please do not hesitate to let me know. Thank you sincerely.

Gedas's email address is: w8bya (at) mchsi.com.



Image: 10 GHz antenna (for illustrative purposes only)

RADIO SPORT for November

2022

**5-7
NOV**

ARRL November
Sweepstakes - CW

ARRL November
Sweepstakes - Phone

**19-21
NOV**

**23
NOV**

SKCC Sprint for
November

CQ World Wide DX
Contest - CW

**26-27
NOV**

Area Nets (updated as of 11/1/22)					
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 Traffic Net	8:00 PM	50.580 USB	FWRC 6-Meter SSB Net
6:00 PM	3.910	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	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)
<p>1. All times local time. Any changes or corrections should be submitted to the newsletter editor at drjoshlong (at) gmail.com.</p> <p>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.</p> <p>3. Reflector REF024B.</p> <p>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.</p> <p>5. Indiana HF Traffic Nets Web Site: http://www.inarrl.org/index.php/public-service/indiana-nts</p>					

Area Repeaters (updated as of 11/1/22)							
Frequency	Offset	Tone/Notes	Callsign	Frequency	Offset	Tone/Notes	Callsign
53.3300	-1 MHz	--	W9FEZ	442.6375	+5 MHz	MDR CC1	N9MTF
145.330	-0.6 MHz	--	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	W9TE	444.8750	+5 MHz	141.3	W9TE
		FM / C4FM					
224.780	-1.6 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	\$25.00 / year
Family membership ¹	\$35.00 / 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.



ARRL FOUNDATION

**Scholarships up to
\$25,000 for amateur
radio operators**

For application information, visit:

<http://www.arrl.org/scholarship-program>

Applications are due by 1/4/23.

