

# CQ CHATTER

JULY 2022

VOLUME B22 • ISSUE 5

## WOOD COUNTY AMATEUR RADIO CLUB

President	KG8FH/W8PSK	Jeff Halsey/Loren Phillips
Vice President	WE8TOM	Tom Leingang
Secretary	N1RB	Bob Boughton
Treasurer	KD8NJW	Jim Barnhouse
Board Member	WB8NQW	Bob Willman

### Minutes *WCARC Meeting* June 13, 2022

**Phil-W8PSK, presiding**

**Present:** Bob-N1RB, Roger-KE8QGV, Bob-WB8NQW, Thom-WB8ZHU, Russ-KE8PJM, Rex- KC8PFP, Terry-KE8CVA, Tom KR8B, Eric-WD8LEI, Phil-W8PSK, Tom-WE8TOM, Stan-K8LL, Jeff-KG8FH

**Meeting called to order:** @ 7:30 PM with Pledge of Allegiance.

**Old Business:**

- In light of the recent severe storm potential, Phil briefly reviewed the

Skywarn set-up in NWOH. The default frequency for Wood County is the 146.79- MHz ARES machine. The District folks have stated that they do not entertain individual check-ins from county repeaters. Each local group should appoint a liaison person to communicate significant observations to the District One machine on 146.61-MHz. The message to whoever brings up the Wood County Skywarn net is that they need to appoint a liaison op who will interact with the District One people.

- The next major item is preparation for Field Day on June 25/26. Phil mentioned that set up will begin at or slightly earlier than noon. It will begin with the erection of the loop and other

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## Net Check Ins-I

Jun 7

Traffic: 0

N1RB (NCS)

KC8EKT/M

KA8VNG

KD8RNO

WE8TOM

WD8LEI

KD8NJW

WB8NQW

W8PSK

KE8PJM

KG8FH

KE8CVA

KE8OZE

K8BBK (14)

Jun 14

Traffic: 0

KG8FH (NCS)

KE8TOM

KE8CVA

WD8LEI

KD8NJW

WB8NQW

W8PSK

KE8PJM

KD8RNO

KA8VNG

N1RB

KE8CUZ

N8VNT (13)

## Brain Teasers

1. What describes the number of times per second that an alternating current makes a complete cycle?
  - a.) pulse rate
  - b.) speed
  - c.) wavelength
  - d.) frequency
2. What is the voltage across each of two components in parallel with a voltage source?
  - a.) it is determined by the type and value of the components
  - b.) half the source voltage
  - c.) twice the source voltage
  - d.) the same as the source voltage
3. How much power is being used in a circuit when the applied voltage is 12 VDC and the current is 2.5 A ?
  - a.) 4.8 watts
  - b.) 30 watts
  - c.) 14.5 watts
  - d.) 0.208 watts

# July Contests

The contest lineup for the month of July is given below. Please note that the WARC bands (60, 30, 17 and 12 m) are never open to contesting.

<b>Jul 1</b>	<i>0000 to 2359 Z</i>	160 m to 10 m
<b>RAC Canada Day 'test</b>		<b>CW/SSB</b>
<b>Jul 2</b>	<i>0000 to 2359 Z</i>	160 m to 10 m
<b>Venezuela Independence Day 'test</b>		<b>all modes</b>
<b>Jul 6</b>	<i>1700 to 2000 Z</i>	2 m
<b>VHF FT-8 Activity 'test</b>		<b>digital</b>
<b>Jul 16-17</b>	<i>1800 to 0559 Z</i>	80 m to 10 m
<b>North American QSO Party-RTTY</b>		<b>RTTY</b>
<b>Jul 13</b>	<i>1700 to 2000 Z</i>	70 cm
<b>UHF FT-8 Activity 'test</b>		<b>digital</b>
<b>Jul 16-17</b>	<i>1800 to 2100 Z</i>	6 m to 2 m
<b>CQ WW VHF 'test</b>		<b>all modes</b>
<b>Jul 23</b>	<i>1000 to 2159 Z</i>	80 m to 10 m
<b>YOTA 'test</b>		<b>CW/SSB</b>

# July Hamfests

**July 16 Northern Ohio ARS Hamfest.** Lorain County Community College, Elyria, OH.

E-mail: [noarsfest@noars.net](mailto:noarsfest@noars.net)

**July 17 Van Wert ARC Hamfest.** Van Wert County Fairgrounds, Van Wert, OH.

web: <http://www.w8fy.org>

## Net Check Ins-II

**Jun 21**                      **Traffic: 0**  
**(NCS)**

**KD8NJW**  
**KD8RNO**  
**KE8CVA**  
**KC8EKT**  
**KG8FH**  
**KC8NKC**  
**WD8LEI**  
**WB8NQW**  
**KA8VNG**  
**WE8TOM**  
**W8PSK**  
**KE8PJM**  
**WD8ICP**    **(13)**

**Jun 28**                      **Traffic: 0**  
**(NCS)**

**WB8NQW**  
**KG8FH**  
**WD8LEI**  
**KD8RNO**  
**KD8NJW**  
**KE8PJM**  
**W8PSK**  
**N1RB**  
**WE8TOM**  
**N8VNT**  
**KC8EKT**  
**WD8ICP**  
**K8BBK**  
**KE8QGV**    **(14)**

Brain Teaser answers: (E) 1-d, 2-d, 3-b

# A Ham of Many Interests

*by N1RB: editor's note: this article is part of the series intended to acquaint the reader with some of the long-time members of WCARC and their interests*

A few years ago, I can recall Yours Truly standing out in a back yard on Bishop Rd. by a 60 foot tower that had just been erected, while a person who is older than me agilely clambered up the rungs to the top to attach some hardware, and then just as spryly came back down. The person in question was Bob Willman, WB8NQW, who first became a ham in 1971 with the call letters WN8NQW, and who currently holds an Extra Class license.

As with most amateurs of that vintage, his entry point was the Novice Class license, which at the time involved passing a 5 wpm code test and a technical exam. At that time, was a two-year non-renewable ticket—in other words, it was upgrade to General, Advanced or Extra class after two years, or off the air for another year.

On the hf bands where they had privileges, Novices were limited to CW operation. Besides that, all Novice operation was crystal controlled, which means that you were parked with your transmitter on the crystal frequency, called CQ, and then patiently tuned up and down the entire Novice band, hoping to hear someone replying to the call.

Bob joined the Wood County Amateur Radio Club before taking the Novice exam and was instrumental in helping to build and install the very first K8TIH repeater. It boasted a total of 10 watts and was entirely home-brewed by the repeater group. It originally operated with separate transmit & receive

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## **WCARC Weekly Net**

Tuesdays at 2100 all year

147.18 MHz 67 Hz PL

### **Net Control Roster**

<i>July</i>	<i>5</i>	<i>N1RB</i>
<i>July</i>	<i>12</i>	<i>KG8FH</i>
<i>July</i>	<i>19</i>	<i>KD8NJW</i>
<i>July</i>	<i>26</i>	<i>WB8NQW</i>
<i>Aug</i>	<i>2</i>	<i>N1RB</i>
<i>Aug</i>	<i>9</i>	<i>KG8FH</i>

## **NEXT MEETING**

### ***Breakfast Meeting***

Saturday

July 2

**TIME: 9:00 AM**

**PLACE:**

**Frisch's Big Boy**

**N. Main St. &**

**E. Poe Rd.**

**Bowling Green, OH**

## ***10 meter Nets***

*Informal SSB group meets*

*Sunday @ 20:30 local on*

*28.335 MHz*

*Informal CW group meets*

*Tuesday @ 20:00 local on*

*28.050 MHz*

## ***Fusion Net***

***Thursday***

***@ 19:30 local***

***on 442.125 MHz***

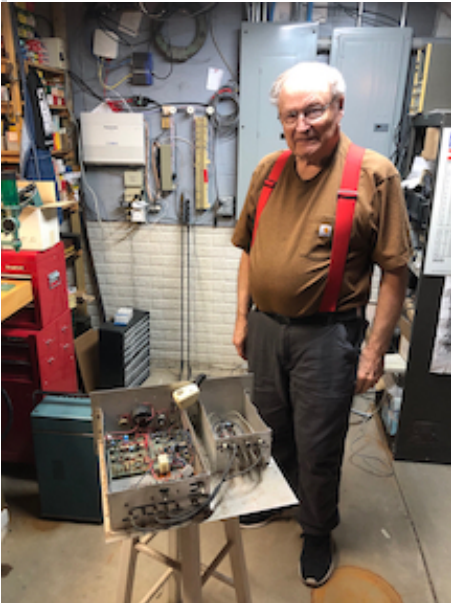
***Wires-X Operators***

***welcome***

***Informal net***

**Ham from p. 4**

antennas without the benefit of duplexers, but after some experimentation, it was



**WB8NQQ with the very first K8TIH repeater**

having such a facility available for emergency communications.

Bob has served as President, and in other Club officer positions a countless number of times. He has tended to the development of new hams, including his son Eric, WD8LEI, who is currently serving as EC for Wood County. He has offered entry-level classes for interested students, and has provided encouragement to the new hams once they earn their ticket. WB8NQQ has been a major organizer and participant in the WCARC Field Day effort, first in making the arrangements to reserve the venue at the Wood County Historical Museum campus, but then also in helping with antenna erection and providing

determined that duplexers really were necessary, so that the pair could then be located in the same space. The duplexers were provided by the County Emergency Coordinator, who clearly understood the benefit of

superb chef service at the dinners and breakfasts.

Bob first got interested in amateur radio via his lab partner, Rich Mencil, K9TSY-later K9UA SK, at the DeVry Technical Institute in Chicago, which he attended, beginning in 1959. After graduating in 1961, he landed a job as a customer engineer with IBM, and had as his responsibility maintaining the reliable operation of a number of mainframe computers and their auxiliary equipment. The early-to-mid-1960s were a time when computers

occupied large air conditioned rooms and developed a great deal of heat because of the vacuum tubes



**Operating position at WB8NQQ**

needed for their operation. In his career, Bob experienced the evolution from the vacuum tube to the miniature solid state chip as the principal memory device in the computer. This trip took about 33 years, while at the same time leading to ever-increasing miniaturization, until now there is almost as much or more computing power in the typical desktop computer, tablet or smartphone.

Bob started out with a Heath DX-60 crystal controlled transmitter and a self-

***continued on p. 8***



**minutes from p. 1**

antennas that may be available. Phil will bring his giant slingshot to scale the trees. The next question was what the preference is for the Saturday dinner-potluck grill or order out. Motion was made and seconded to order out for pizza (RB/FH)—passed unanimously. Bob (NQW) confirmed that overnight operation is approved and at the present time there are at least two operations that will likely overnight at the site—NM8W and W4LAT. He also mentioned that the Museum newsletter has provided excellent publicity for the event.

- Jeff (FH) reminded everyone about the CW net every Tuesday at 8 PM on 28.050 MHz.
- Phil reported on the progress of his AREDN station, and hopes to soon have the antenna mounted on his 50 ft tower for distance testing. He suggested that the AREDN folks should set up a separate interest group to meet and decide on future antenna purchases and the future of the local mesh network.
- The issue of what to do with all the old Club equipment that is disbursed among several of the members is still not settled. One suggestion is to take the sellable pieces to the Findlay Hamfest in September. To this end,

Phil asked for volunteers to serve on an ad hoc committee to come up with a plan to dispose of these materials. The Antiquities Committee consists of: Jeff-KG8FH, Bob-WB8NQW and Roger-KE8QGV.

- Eric (LEI) gave a quick rundown on issues being considered by Wood County ARES. Besides finishing the antenna installation on the roof of the Courthouse Annex, he reiterated that plans are still being developed for addressing the coming of the Solar Eclipse in 2024.

**New Business:**

- Phil inquired if there was any interest in holding a foxhunt this summer—there are two breakfast meetings coming up on the calendar: July 2 and September 3. A choice also needs to be made as to whether to do a UHF event on foot using the Baofeng HTs or a regular VHF hunt using vehicles. Consensus is to go for a foxhunt after the September 3 breakfast—type is yet to be determined.
- Phil reminded everybody that the next meeting is breakfast on July 2, and the month after that a business meeting on August 8.

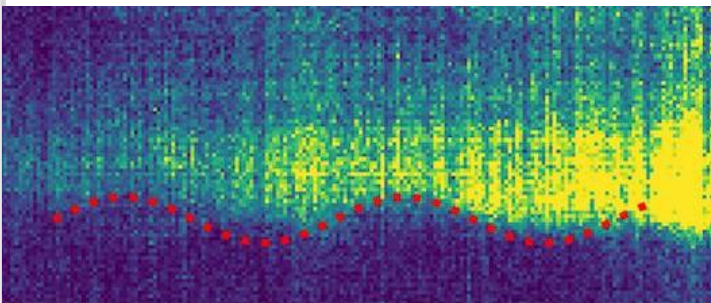
**Adjournment:** at 8:10 (TOM/NQW)

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## Ham Radio Operators Tune In to Giant Waves in the Earth's Ionosphere

Sometimes the electrons in the upper atmosphere clump up and form giant waves larger than Texas that zip around the Earth faster than a jet plane! A team of researchers from the NASA/NSF-supported Ham Radio Science Citizen Investigation (HamSCI) led by Nathaniel Frissell at The University of Scranton has observed these giant waves for the first time. Volunteers from the amateur radio community collected the data.

This new technique vividly demonstrates the effect of these waves on radio communications. It can help us understand where these waves come from, and how the layers of our atmosphere interact. These results were published in the American Geophysical Union journal *Geophysical Research Letters*. If you love amateur radio and like to get involved with the HamSci citizen science project, visit <https://hamsci.org/>. ■



The distance that amateur radio operators can communicate with each other changes over time, tracing a wave-like pattern (red dots). Credit: Frissell et al.

*ham from p. 6*

built Heath SB-301 receiver. In 1972, the crystal control requirement for Novices was dropped, and Bob added the HG-10 VFO. As an Advanced Class ham he then moved up the Heathkit ladder, operating the SB-301/401 rcvr/xmtr twins, while at the same time exhibiting his skills at constructing these pieces of equipment. Bob related that he enjoyed building Heathkits very much, and besides ham equipment he has also constructed several color TV sets, a Thomas/Heath



Recently Erected Rohn Tower

organ and several pieces of audio/service equipment and accessories, totaling over 60 different kits.

After a couple of equipment-destroying disasters, which included a house fire and a lightning strike, his present operating configuration covers hf with a Kenwood TS-2000. He has another one to handle VHF/UHF duties. Also on tap are a Yaesu Fusion model FTM-400 and a Yaesu model FTM-300 that is used for mobile work.

*continued on p. 9*



**ham from p. 8**

The antenna farm at WB8NQW's shack is impressive. The sixty foot tower mentioned earlier is shown with a Diamond VHF/UHF dual bander that is fed by 1-1/4" heliax, and an AREDN microwave mesh antenna that is fed with weatherproof Ethernet cable. Future plans include installing the 6 meter vertical that is currently at the ready on the ground, waiting for good antenna weather. The high profile of the VHF/UHF antennas provides the opportunity for Bob to look for openings on 2 meters and 70 cm (and eventually on 6 meters). When installed, the 6

meter vertical will allow Bob to enjoy one of his favorite activities, VHF/UHF DX. He has unofficially participated in the annual simplex contest run by the Ohio SEC and has done well, contacting 17 Ohio counties in



**Tribander on Tower**

the most recent run. The 60 foot tower itself is a Rohn type 55, which is commercial grade construction, and which will undoubtedly last a very long time. Bob also has a shorter 40 foot

tower on which is mounted a three element triband Yagi and a 6 meter Yagi.

It is obvious that Bob is what we would term a very "active" ham. However, that would be only scratching the surface of his hobby activities.

He is quite active in blacksmithing, as a member of the Northwest Ohio Blacksmiths, and often provides demonstrations of the craft, usually through Wood County Historical Museum events. As a member of the Power of Yesteryear Club, Bob is a fan of antique power machinery, including steam powered equipment. In one of his outdoor sheds, he has installed an operational single-cylinder hit-and-miss oil field engine that was a common sight near the wellhead during the Northwest Ohio oil boom. Other interests include participation in the Historical Construction Equipment Museum on Liberty Hi Road.

**minutes from p. 7**

**Program:**

The meeting was followed by a very interesting demonstration by Jeff (FH) of his homegrown Geochron, using a Raspberry Pi controller. He briefly went over the features of the HamClock software which is used to run the (virtual) Geochron on the screen. This device provides a map showing the day/night areas of the Earth as well several panels of use to DXers, such as solar images, and propagation aids. Thanks, Jeff, for a very informative presentation. ■



MARK YOUR CALENDARS FOR THE:  
**2022 AWA Conference**  
**October 4 thru 8, 2022**



RIT Inn and Conference Center - 5257 West Henrietta Road - Henrietta, NY 14467

- Dual themes: “100 Years of Car Radios” and “Evolution of Audio”
- **Free\* access for buyers and sellers - Thursday 10/6 & Friday 10/7 to the AWA Communication & Electronic Equipment Flea Market**
  - Equipment auction on Saturday 10/8
  - Book mart
  - Over a dozen outstanding presentations
  - Equipment contest
- Admission to the Antique Wireless Museum is free Wednesday October 5th



**ARRL  
SANCTIONED  
EVENT**

**\*You do not need to register for the conference to buy or sell at the flea market.** Conference registration: includes the free dessert social on Wednesday evening October 5<sup>th</sup>, this year’s registration also includes your free Friday night banquet dinner and includes equipment auction bidder’s card. As always, registration for your spouse or significant other is free. You do not need to be an AWA member to attend.

For complete details: <https://www.antiquewireless.org/homepage/annual-conference/>

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43402**

