

CQ CHATTER

NOVEMBER 2022

VOLUME B22 • ISSUE 9

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*** October 10, 2022

Phil-W8PSK presiding

Present: Bob-N1RB, Phil-W8PSK, Jeff-KG8FH, Wil-KC8IFW, Jim-KD8NJW, Terry-KE8CVA, Tom-WE8TOM, Bob-WD8LIC, Larry-K3LB, Chuck-WD8ICP, Eric-WD8LEI, Bob-WB8NQW

Meeting called to order: by W8PSK at 7:30 with Pledge of Allegiance

Minutes: of the August meeting as published in the September issue of CQ Chatter were approved unanimously (NJW/FH).

Treasurer's Report: was presented by KD8NJW. Motion to approve (NQW/FH) was passed unanimously.

Old Business:

- Bob-WB8NQW, described the progress of the Equipment Committee, and the list that they have developed. A pictorial description of the inventory will be distributed soon to CQ Chatter subscribers.
- The collection of historical documents that the Club possesses will need to be sorted and scanned. Jeff (FH) suggests splitting the scanning chores. After some discussion, the consensus was to make equipment directly available for purchase at an open meeting first, then to on-line subscribers.

continued on p. 6

Net Check Ins-I

Oct 4 **Traffic: 0**

N1RB (NCS)

KE8CVA

WD8ICP

WD8LEI

WB8NQW

W8PSK

KC8EKT

KG8FH

KE8PJM

KA8VNG

KD8RNO

WE8TOM

KE8OZE (13)

Oct 11 **Traffic: 0**

KD8NJW (NCS)

KE8CVA

KG8FH

WB8NQW

W8PSK

KD8RNO

KA8VNG

N1RB

WE8TOM (9)

Oct 18 **Traffic: 0**

WB8NQW (NCS)

WD8LEI

W8PSK

KD8RNO

KE8QGV

KD8NJW

KA8VNG

WE8TOM

KE8CVA

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 formula for converting frequency to approximate wavelength in meters?
 - a.) wavelength in meters equals frequency in hertz multiplied by 300
 - b.) wavelength in meters equals frequency in hertz divided by 300
 - c.) wavelength in meters equals frequency in megahertz divided by 300
 - d.) wavelength in meters equals 300 divided by frequency in megahertz
3. Which of the following is combined with an inductor to make a tuned circuit?
 - a.) resistor
 - b.) Zener diode
 - c.) potentiometer
 - d.) capacitor

November Contests

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

Nov 5-7	<i>2100 to 0300 Z</i>	160 m to 10 m
ARRL Sweepstakes-CW		CW
Nov 12-13	<i>0000 to 2359 Z</i>	80 m to 10 m
WAE DX 'test RTTY		RTTY
Nov 12-13	<i>0001 to 2359 Z</i>	10 m
10-10 Fall 'test-digital		digital
Nov 12-13	<i>1200 to 1200 Z</i>	160 m to 10 m
OK/OM DX 'test-CW		CW
Nov 12-13	<i>0700 to 1300 Z</i>	160 m to 10 m
JIDX Phone 'test		SSB
Nov 13-16	<i>1400 to 0800 Z</i>	160 m to 10 m
Classic Exchange-Phone		SSB
Nov 19-20	<i>1200 to 1200 Z</i>	80 m to 10 m
LZ DX 'test		CW/SSB
Nov 19-20	<i>1700 to 0100 Z</i>	160 m
REF 160 m 'test		CW
Nov 19-21	<i>2100 to 0300 Z</i>	160 m to 10 m
ARRL Sweepstakes-SSB		SSB
Nov 26-27	<i>0000 to 2359 Z</i>	160 m to 10 m
CQ WW DX 'test-CW		CW

Net Check Ins-II

Oct 18. -- continued

WD8ICP

KG8FH

KE8OZE (12)

Oct 25 Traffic: 0

WB8NQW (NCS)

KE8CVA

KG8FH

WD8LEI

KE8QGV

W8PSK

KD8RNO

WD8LIC

KA8VNG

WE8TOM

WD8ICP

KD8NJW

N8VNT

KC8EKT (14)

Nov 1 Traffic: 0

KG8FH (NCS)

KE8CVA

KC8JMU

W8PSK

KD8NJW

K8LL

WB8NQW

WE8TOM

KA8VNG

N1RB

KC8EKT (11)

minutes from p. 1

- Eric (LEI) made a brief report on the status of the County-wide ARES repeater system. The voter system should be completely functional at the present time. He has had no contact yet on the proposal to mount an AREDN node on the County Court House--permission of the County Commissioners is required.
- Phil (PSK) made a brief report on some of the testing that was carried out by the AREDN group in building up the Wood County mesh. Bob (RB) aided by Roger-KE8QGV, and Jeff (FH) aided by Matt-KE8NEC brought their equipment to the roof of Offenhauer West, while PSK and NQW monitored for any traffic at their home QTHs. The connection from the dorm site to WB8NQW was observed to be well above average. However, there seemed to be no way of raising W8PSK. Speculation is that the commercial cell tower lying between W8PSK and Offenhauer is causing de-sense of the AREDN equipment. Phil plans to invite Chrissy-KC8UFV down to his home for a discussion with the Wood County group in the near future.

New Business:

- Phil reminded everybody that it is time to develop a new Officer slate for 2023. He indicated that he would like to encourage some of the younger members to participate in the governance of the Club.
- The Kick-off Banquet was once again proposed to be held at the Country Farmhouse in Wayne (NQW will check back on confirmation). The tentative date is Monday, January 9, 2023.

Adjournment: at 8:36 pm

A presentation on groups.io was made by WE8TOM. ■

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

WCARC Weekly Net

Tuesdays at 2100 all year
147.18 MHz 67 Hz PL

Net Control Roster

<i>Nov</i>	<i>1</i>	<i>KG8FH</i>
<i>Nov</i>	<i>8</i>	<i>KD8NJW</i>
<i>Nov</i>	<i>15</i>	<i>WB8NQW</i>
<i>Nov</i>	<i>22</i>	<i>N1RB</i>
<i>Nov</i>	<i>29</i>	<i>KG8FH</i>
<i>Dec</i>	<i>6</i>	<i>KD8NJW</i>

NEXT MEETING

Breakfast Meeting

Saturday

November 5

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

November Hamfests

November 19-20: Allen County Amateur Radio Technical Society. Allen County War Memorial Coliseum, Ft. Wayne, IN.

web: www.acarts.com/hfmain/htm

December 3: Fulton County ARC. Ruihley Park Pavilion, Archbold, OH

web: www.k8bxq.org/hamfest

December 4: L'Anse Creuze ARC. Balkan American Community Center, Troy, MI. **web:** www.n8lc.org

Wood County AREDN Mesh Is Up!

By Eric-WD8LEI

Recently we installed a few new Amateur Radio Emergency Data Network nodes in order to begin the process of building and using an AREDN mesh network in Wood County. Because of the good relationship between WCARC and WCARES, this mesh network can be used for day-to-day and emergency operations. In the event of a major communications network failure of standard public services, AREDN would prove to be a vital link that amateur radio operators can provide.

Some important testing had been started with Phil, W8PSK, taking charge and with many things being learned. Recently LEI ordered 10 MikroTik mANTBox units to convert to AREDN service. After a somewhat frustrating job of getting all the boxes converted to the latest stable AREDN firmware, it was a

happy development when the 10th box was complete.

On 10/18/22, Eric, with the cooperation of the Sheriff, deployed the first new node (WD8LEI-**CHR-BGNW**) about 195 feet high on the **County Home Road** radio tower pointed directly into Bowling Green. Within moments of turning it on, the node of WB8NQW locked in and eventually went to near 100% link quality. It should be noted that NQW is 4.8 air miles away from the tower node. The first MeshChat was started with messages flowing both ways.

Eric set up a temporary node on the roof of the sheriff's office (WD8LEI-**WCSO-SE**) with a plan to extend the data cable down into the training room adjacent to the ham antenna connectors for future AREDN operation from that location. This node was turned off a few days later to investigate a possible interference issue on the mesh network but should be ready to turn back on soon.

continued on p. 7

AREDN from p. 6

Another node was placed at Offenhauer with an existing cat5e cable that was available. This node appears to be a total bust as it can see nothing even though the **CHR** tower is visible with clear line of sight. LEI believes the Lucas Co public safety system on 700/800 MHz is simply too close and is interfering with the node receiver. It is felt that this node would be better served by locating on the Newton Rd water tower pointed SW to pick up that part of BG that wouldn't otherwise be able to see the **CHR** tower. More discussion will for sure occur at future club meetings.

Yet another node was placed on the roof of the county office building (WD8LEI-**WCCH-SE**) using one of the cat5e cables installed for ham radio operation from the EOC. This node has a very nice signal from the **CHR** tower. Several Sheriff's office towers will be climbed over the next 6 weeks as part of a radio upgrade, so it's a great time to install new equipment. Currently slated for deployment will be another node on the CHR tower (WD8LEI-**CHR-BGE**) at about 140 feet pointed east and a node on the Linwood Rd tower (WD8LEI-**LINW-BGS**) pointed SSW to hopefully cover the Cygnet and Rudolph areas. Eric is considering several nodes around the county and will report on them at the meetings as they go up. Several hams in the club are now successfully connecting to the mesh network and/or testing

additional nodes. The mesh becomes even more powerful as more nodes are added. Future plans for LEI include deploying an Asterisk PBX server (already built, waiting for final programming) for VoIP phones for use at events and between ham shacks, a Network Time Protocol (NTP) server (hopefully same box as PBX server) so all ham equipment will be able to synchronize time settings for accuracy, at least 1 permanent camera for testing and demonstration purposes, and perhaps a centralized MeshChat server to make things more simple. These items can be placed in the shack at the **CHR** site with generator and battery back-up available. Eric, who is not a Linux expert by any means, will be asking for help to deploy future applications and looking for suggestions on how to make the Wood Co mesh even stronger.

It is hoped that our innovation here in Wood County will allow other adjacent counties to mesh with us so that we can share resources together in the true ham radio spirit. Our mesh network may be an important communications component in the event of an emergency, service projects such as a bike race, or the upcoming eclipse. Now that a basic mesh network is built, it should be easier to understand and grow. A huge shout-out to everyone who has participated in building 'go-kits' or testing of the system. It is great to see ham radio grow in new directions. ■

FOR SALE:

Xiegu G90 HF Radio.

Includes the cooling fan-stand. 20 watts. Great for portable operation. \$300 for club members. Will be listing publicly at a higher price soon. Contact

WE8TOM@we8tom.com

WOOD COUNTY ARC
P.O. BOX 534
BOWLING GREEN, OH
43402

