

CQ CHATTER

JANUARY 2024

VOLUME B23 • ISSUE 11

WOOD COUNTY AMATEUR RADIO CLUB

President	KG8FH	<u>Jeff Halsey</u>
Vice President	WE8TOM	<u>Tom Leingang</u>
Secretary	N1RB	<u>Bob Boughton</u>
Treasurer	KD8NJW	<u>Jim Barnhouse</u>
Board Members	WB8NQW/KE8QGV	Bob Willman/Roger Weith

Minutes

WCARC Meeting
held at WB8NQW's QTH
December 11, 2023

Jeff-KG8FH presiding

Present: N1RB-Bob, KG8FH-Jeff, WD8LEI-Eric, KE8CVA-Terry, KB8QEW-Shawn, KE8WTG-Norm, N8ET-Bill, KD8RNO-Lynn, Dave Spengler, KD8NJW-Jim, KE8QGV-Roger, KC8IFW-Wil, WB8NQW-Bob

Meeting called to order: by KG8FH at 7:30 with Pledge of Allegiance

Minutes: of the August meeting as published in the November issue of CQ

Chatter were approved unanimously (QGV/NQW).

Treasurer's Report: Motion to approve (RB/QEW) was passed unanimously. Jim reminded all that 2024 dues are now payable.

Old Business:

- Eric (LEI) reported on the status of the UHF Master II transmitter, which was taken to a repair shop in Defiance. The replacement part that was ordered has arrived and should be installed soon.
- Eric also reported that the ARES DMR repeater is back on the air and is back connected to the Brandmeister System —apparently there was a compatibility problem with the Henry amplifier that was being used.

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Net Check Ins-I

Dec 5

Traffic: 0
(NCS)

KD8NJW
KG8FH
KC8EKT
WB8NQW
KD8RNO
N1RB
KE8WTG
KE8QGV
KD8VWU
WE8TOM
KE8CVA

(11)

Dec 12

Traffic: 0
(NCS)

WB8NQW
KC8EKT
KG8FH
KE8CVA
WD8LEI
KD8NJW
KD8RNO
KD8VWU
N1RB
KE8WTG

(10)

Brain Teasers

1. What technique allows commercial analog TV receivers to be used for fast-scan TV operations on the 70-centimeter band?
 - a.) transmitting on channels shared with cable TV
 - b.) using converted satellite TV dishes
 - c.) transmitting on the abandoned TV channel 2
 - d.) using USB and demodulating the signal with a computer sound card?
2. In what direction does an electromagnetic wave travel?
 - a.) it depends on the phase angle of the magnetic field
 - b.) it travels parallel to the electric and magnetic fields
 - c.) it depends on the phase angle of the electric field
 - d.) it travels at a right angle to the electric and magnetic fields
3. Which of the following can be measured with an antenna analyzer?
 - a.) velocity factor
 - b.) cable length
 - c.) resonant frequency of a tuned circuit
 - d.) all these choices are correct

January Contests

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

Jan 6	<i>1800 to 2359 Z</i>	160 m to 2 m
ARRL Kids Day		phone
Jan 6-7	<i>1800 to 2359 Z</i>	80 m to 10 m
ARRL RTTY Roundup		digital
Jan 13	<i>0000 to 2359 Z</i>	80 m to 10 m
YB (Indonesia) DX 'test		SSB
Jan 13-14	<i>1800 to 0559 Z</i>	160 m to 10 m
North American QSO Party-CW		CW
Jan 20-21	<i>1200 to 1159 Z</i>	160 m to 10 m
HA (Hungary) DX 'test		CW/SSB
Jan 20-21	<i>1800 to 0559 Z</i>	160 m to 10 m
North American QSO Party-SSB		SSB
Jan 20-22	<i>1900 to 0359 Z</i>	6 m and up
ARRL VHF 'test		all modes
Jan 27-28	<i>0600 to 1800 Z</i>	80 m to 10 m
REF (France) DX 'test-CW		CW
Jan 27-28	<i>1300 to 1300 Z</i>	80 m to 10 m
UBA (Belgium) DX 'test-SSB		SSB
Jan 27-28	<i>1900 to 1900 Z</i>	160 m to 10 m
ARRL Winter Field Day		all modes

Net Check Ins-II

Dec 19 **Traffic: 0**
N1RB **(NCS)**
KC8EKT
KE8CVA
WD8LEI
KD8NJW
WB8NQW
KD8VWU
WE8TOM
KE8WTG
WD8LIC
K8RNO **(11)**

Dec 26 **Traffic: 0**
KD8NJW **(NCS)**
WE8TOM
KE8CVA
KC8EKT
WD8LEI
WB8NQW
KD8RNO
N8VNT
KD8VWU
WD8ICP **(10)**

HamSCI Announces Initial Observations From 14 October Annular Solar Eclipse

Dr. Nathaniel Frissell, W2NAF, Lead Organizer for HamSCI (Ham Radio Science Citizen Investigation) and assistant professor of physics and engineering at The University of Scranton, W3USR, has announced initial observations from the October 14th annular solar eclipse across North America.

“The October 14th celestial event has provided some very interesting early data for ionospheric research” Frissell noted in working with the HamSCI scientific team. “While we are only in the early stages of analysis and looking ahead to the total solar eclipse across much of North America on April 8th, we are encouraged that our planned experiments with data contributed largely by amateur radio operators will yield a wealth of new discoveries in the next year or so.”

Hundreds of amateurs participated in the HamSCI event by getting on the air. Combining *their* data with contacts from other amateur contest activities, citizen-science cooperation contributed to one of the largest participatory days ever in amateur radio history.

This project is studying the ionospheric response to the 2023 annular and 2024 total solar eclipse through a series of large-scale citizen science experiments known as the HamSCI Festivals of Eclipse Ionospheric Science (FoEIS), which includes the Solar Eclipse QSO Parties (SEQPs). The data for these experiments are generated by amateur radio operators communicating with each other over and around the eclipse paths using medium and high frequency signals that are refracted back to Earth by the ionosphere, and therefore sensitive to eclipse-induced ionospheric changes. These Festivals are coordinated

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

WCARC Weekly Net

Tuesdays at 2100 all year

147.18 MHz 67 Hz PL

Net Control Roster

<i>Jan</i>	<i>2</i>	<i>KD8NJW</i>
<i>Jan</i>	<i>9</i>	<i>WB8NQW</i>
<i>Jan</i>	<i>16</i>	<i>N1RB</i>
<i>Jan</i>	<i>23</i>	<i>KG8FH</i>
<i>Jan</i>	<i>30</i>	<i>KD8NJW</i>
<i>Feb</i>	<i>6</i>	<i>WB8NQW</i>

NEXT MEETING

Kick-off Banquet

Monday January 8

TIME: 6:00 PM

PLACE:

Country Farmhouse

Restaurant

117 E. Main St.,

Wayne, OH

Reservations:

blcksmth@reagan.com

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

minutes from p. 1

- Eric commented that the Courthouse antennas are ready to be mounted since maintenance has installed the support bracket. He is suggesting that we take advantage of the warmer weather in the upcoming week if possible to get them mounted and tuned.
- Jeff (FH) announced completion of the transferral of the repeater Trusteeship to Tom-WE8TOM and the renewal of the K8TIH Club license for 10 more years.
- Bob (NQW) reminded everybody that the kick-off Banquet will be held on Monday, January 8th, at the Country Farmhouse restaurant in Wayne. Reservations are at 6 PM, and can be made through Bob at blcksmth@reagan.com. Meals will be ordered off of the menu.
- Jeff presented the 2024 officer slate, consisting of: President-KG8FH, Vice President-WE8TOM, Secretary-N1RB and Treasurer-KD8NJW. He opened the floor for additional nominations. None were heard and a motion was made to close nominations (QGV/CVA). The slate was voted on and was unanimously approved.
- Jeff reminded everybody that the next meeting is a business meeting on February 12 at 7:30 PM in the Sheriff's Training Room. He also explained that the March meeting will also be a business meeting and is scheduled for Monday, March 11th at 7:30 PM. The

April meeting will be a breakfast meeting on Saturday, April 6th at 9 AM at Frisch's Big Boy. The switch was occasioned by occurrence of the Solar Eclipse on April 8th, which was our normal business meeting date.

- Bob (NQW) explained the arrangements for auctioning the surplus equipment that filled part of the basement. He also discussed what we should do with any left overs. He suggests that we transfer anything of use to the Club over to the climate controlled space at County Home Rd., and then try to peddle anything not of use at the next TMRA hamfest. The consensus was that this is a workable plan.
- There was no new business on the agenda.

Adjournment: moved at 7:55 PM (LEI/QEW). ■

Last Chance for Banquet

This is the last chance to make reservations for the kick-off banquet on January 8 at 6 PM. The location is the Country Farmhouse restaurant at 117 E. Main St., in Wayne, OH. Meals ordered off the menu. If you are interested, please contact Bob Willman-WB8NQW, before New Years Day, at: blcksmth@reagan.com to make reservations. ■

HamSCI from p. 4

by HamSCI in collaboration with volunteers from across the amateur radio community.

The FoEIS consists of six primary components—The Solar Eclipse QSO Party (SEQP), the Grape High Frequency Doppler Experiment, WSPRdaemon observations, the Medium Wave AM Doppler Experiment, the High Frequency Time Difference of Arrival Experiment (TDOA), and the Very Low Frequency (VLF)/Low Frequency (LF) Experiments.

The SEQP was well represented with amateurs contributing 300 logs. Dr. Phillip Gladstone noted that, at noon Eastern Daylight Time on October 14th, his data collection service (pskreporter.org) was capturing spots at a rate of 3,600 contacts per second. The combination of the SEQP with other contests during that day contributed to a high volume of overall activity - well over 7 million spots were recorded during the SEQP period.

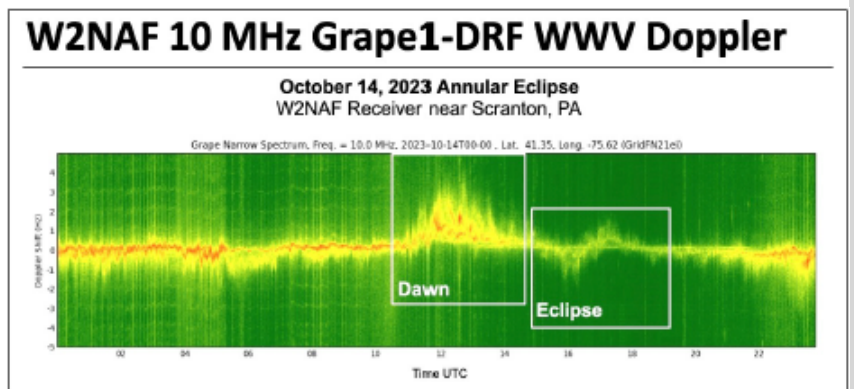
The WSPRdaemon.org experiment, led by Rob Robinett, AI6VN, and Gwynn Griffiths, G3ZIL, successfully deployed new GNSSDO-stabilized FST4W beacon transmitters that captured eclipse HF

Doppler curves using their custom decoding software. Initial wsprdaemon.org results are available at <http://wsprdaemon.org/technical.html>.

Over thirty Grape Personal Space Weather Stations submitted an estimated 26,700 observations from across North America. Originally designed by John Gibbons, N8OBJ, and team at Case Western, W8EDU, the Grape receivers for this experiment were built by individuals and with volunteer efforts of the New England Grape Group. As an example, Figure 1 shows observations of the 10 MHz carrier transmitted by WWV in Colorado and received by a Grape receiver near Scranton, PA. The positive frequency shifts from 10 to 14 UTC are associated with the dawn transition. The S-shaped curve in the 1500-1800 UTC time window results from the solar eclipse effects. Grape-DigitalRF observations are available for download from <http://psws.hamsci.org>, a database developed by Bill Engelke, AB4EJ and team at The University of Alabama. ■

Fig. 1

**For more info, go to:
<http://ARNewsline.org>
And select EXTRA tab**



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