

CQ CHATTER

JUNE 2024

VOLUME B24 • ISSUE 4

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

Local Tornado in Early May

The evening of Tuesday, May 7, was filled with some excitement when, early in the evening, a cluster of storms swept across NW Ohio. The energy intensity was high enough to generate tornadoes.

A tornado warning was issued for southern Wood County just before the weekly net was scheduled to start at 9 PM. As a result, the net participants were alerted to be on the lookout for any severe events so that they could be reported to the Skywarn net in Lucas County. There was a funnel sighted near McComb, in Hancock County. A photo of the twister is shown at the right. Thanks to Christopher Morman, who took the shot, and to Terry-KE8CVA, who shared it. ■



Net Check Ins-I

May 7

Traffic: 0
(NCS)

N1RB
KD8VWU
KE8WTG
WE8TOM
KG8FH
WB8NQW
WD8LEI
KE8CVA
KC8EKT
KD8NJW
KE8PJM
KE8OZE
KD8RNO
K8DLF
KE8NEC
KE8QGV
W8ALM
KG8FU
N8HOT

(19)

May 14

Traffic: 0
(NCS)

KG8FH
KE8CVA
KC8EKT
WD8LEI
KD8NJW
WB8NQW
W8PSK
KE8QGV
KE8OZE
KD8RNO
KD8VWU
N1RB
WE8TOM
WD8ICP
KC8NKC

(15)

Brain Teasers

1. On what bands may automatically controlled stations transmitting RTTY or data emissions communicate with other automatically controlled digital stations?
 - a.) on any band segment where digital operation is permitted
 - b.) anywhere in the non-phone segments of the 10-meter or shorter wavelength bands
 - c.) only in the non-phone Extra Class segments of the bands
 - d.) anywhere in the 6-meter or shorter wavelength bands, and in limited segments of some of the HF bands
2. Which of the following is good practice when choosing a transmitting frequency to answer a station calling CQ using FT8?
 - a.) always call on the station's frequency
 - b.) call on any frequency in the waterfall except the station's frequency
 - c.) find a clear frequency during the same time slot as the calling station
 - d.) find a clear frequency during the alternate time slot to the calling station
3. Which of the following direct, fused power connections would be the best for a 100-watt HF mobile installation?
 - a.) to the battery using heavy-gauge wire
 - b.) to the alternator or generator using heavy-gauge wire
 - c.) to the battery using insulated heavy duty balanced transmission line
 - d.) to the alternator or generator using insulated heavy duty balanced transmission line

June Contests

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

Jun 1-2 Kentucky QSO Party	<i>1300 to 0100 Z</i>	160 m to 10 m all modes
Jun 1-2 ARRL Int'l Digital 'test	<i>1800 to 2359 Z</i>	160 m to 6 m digital (no RTTY)
Jun 8 VK (Australia) Shires 'test	<i>0000 to 2359 Z</i>	160 m to 10 m CW/SSB
Jun 8-9 Portugal Day 'test	<i>1200 to 1200 Z</i>	80 m to 10 m CW/SSB
Jun 8-10 ARRL VHF 'test	<i>1800 to 0259 Z</i>	6 m up all modes
Jun 15-16 All Asian DX 'test-CW	<i>0000 to 2359 Z</i>	160 m to 10 m CW
Jun 15-16 West Virginia QSO Party	<i>1600 to 0400 Z</i>	80 m to 10 m all modes
Jun 15 ARRL Kid's Day	<i>1800 to 2359 Z</i>	80 m to 2 m SSB/FM
Jun 22-23 King of Spain 'test-SSB	<i>1200 to 1200 Z</i>	160 m to 10 m SSB
Jun 22-23 ARRL Field Day	<i>1800 to 2100 Z</i>	160 m on up all modes

Net Check Ins-II

May 21 **Traffic: 0**
WB8NQW **(NCS)**
KG8FH
KC8EKT
KD8RNO
WE8TOM
KE8WTG
KD8VWU
W8PSK
N1RB
NM8W
N1LB
KE8QGV
WD8ICP
N8VNT **(14)**

May 28 **Traffic: 0**
WB8NQW **(NCS)**
N1RB
WE8TOM
KD8VWU
KB8QEW
WD8LEI
KE8QGV
KD8RNO
KG8FH
KE8CVA
KC8EKT
KE8PJM
KE8WTG **(13)**

What I Heard During the Solar Event

Mark Persons *Society of Broadcast Engineers*

Coronal mass ejections from the Sun are plasma with magnetic fields. They can collide with Earth's magnetosphere, producing the auroras that fascinate us. This is a well-known phenomenon in the amateur radio community because of the effect on radio propagation.

This month, astronomers predicted a geomagnetic storm was coming a few days in advance. It was the biggest since 2005, but was not a remarkable visual display at my location in central Minnesota, some 46 degrees north of the equator. Thanks to Paul Bruegl in Battle Ground, Wash., for providing a dazzling photo from his neighborhood.

AM Radio

The event had a big effect on AM radio. As most people know, AM stations can be heard far away at night because the three-layer ionosphere is 37 to 190 miles above the Earth. These ionized layers reflect medium-frequency radio waves back to Earth at night. The Sun changes the ionosphere so that reflections do not occur in the AM band during the day.

KXEL Radio in Waterloo, IA, sends its 1540 kHz signal my way with a two-tower 50 kW directional at night. Being about 300 miles away, it is not heard here during the day, but has a strong signal, almost as good as local stations, into my town at night. Its audio was non-existent during the aurora.

WCCO Radio in Minneapolis, MN, 50 KW on 830 kHz, sounded that night just as they do during the day. They are 125 miles from my location. I normally hear selective fading of their signal at night.

continued on p. 6

WCARC Weekly Net

Tuesdays at 2100 all year
147.18 MHz 67 Hz PL

Net Control Roster

May	28	WB8NQW
Jun	4	N1RB
Jun	11	KG8FH
Jun	18	KD8NJW
Jun	25	WB8NQW
Jul	2	N1RB

NEXT MEETING

Business Meeting

Monday June 10

TIME: 7:30 PM / 7:00 EB

PLACE:

Sheriff's Training Room
E. Gypsy Lane Rd. &
S. Dunbridge 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

solar from p. 4

What I am referring to is receiving a ground wave signal from the station, plus a signal that bounces off the ionosphere at night. The signals can combine in phase or can cancel when a time difference of .0006 milliseconds, or multiples of that, occurs between the ground and sky waves that are 180 electrical degrees apart. Selective fading creates obnoxious audio distortion for a few seconds and then is repeated again maybe a minute later. Timing of the fading varies because sky reflections vary in amplitude. As mentioned, the WCCO night signal sounded like a daytime signal during the Aurora.

Similar interference-free reception happened on semi-local stations, like KKIN(AM) in Aitkin, MN, which runs 360 watts at night. They are 38 miles from my location. Co-channel beats and adjacent channel chatter were gone. They normally suffer interference at night but were fairly clean because interferers were not reflected down from the sky to compete with their signal.

Higher frequencies are less affected by reflections during the day. On the amateur radio side, I normally participate in a 75-meter (3908 kHz) net where operators from a five-state area check in on Saturday mornings to talk about contacts they made that week to foreign countries via ionospheric reflections. The band was absolutely dead during the solar



Aurora Borealis in WA, courtesy Paul Bruegl event. No signals were heard. Even the noise level was low because random noise from elsewhere was not reflected down to my location. Things returned to normal a few days later.

Listening in the 120 through 16-meter (2.3 to 17.9 MHz) shortwave broadcast bands was nearly impossible during the *continued on p. 7*

IT'S TIME TO RENEW YOUR MEMBERSHIP

Dues Payable to:

**WCARC, P. O. Box 534
Bowling Green, OH 43402**

Senior/Student:	\$10
Regular:	\$15
Family:	\$20

June Hamfests

June 16 Hamfest and Computer Show. Monroe County RCA. Monroe County Fairgrounds, Monroe, MI web: www.mcrca.org

solar from p. 6

Aurora. Also, there were some reported accuracy problems with GPS signals during the event. I haven't heard a total this time, but some 38 commercial satellites were reported lost in a 2022 storm.

History

A geomagnetic storm can stress the power grid to the point of failure. A 1989 storm induced unwanted currents in power lines, causing a nine-hour blackout for 6 million customers in and around Quebec, Canada.

Then of course there is the story from 1859 when telegraph lines became unusable. At least one fire was reported from arcing and sparking at telegraph stations. That one was named the Carrington Event, after British astronomer Richard Carrington for his work in documenting solar flares.

You have likely heard that there is an eleven-year sunspot cycle where the Sun goes from being quiet to active, then back again. We are near the active peak in cycle 25 of this documented phenomenon.

Geomagnetic storms have happened before and will happen again. Our increasing dependence on all things

electrical for our homes, businesses and communications in our society has made us more vulnerable to Mother Nature's whims. Comment on this or any article. Write to radioworld@futurenet.com. ■

K8TIH UHF Repeater Close to Being Back in Action

After a few months out of action, the K8TIH presence on 444.475 MHz will soon be heard again. After several false starts in trying to replace the defunct GE Master II unit with another similar model, it was at last decided to purchase a used Kenwood model TKR-850 UHF repeater. A suitable unit was identified and purchased, and will soon be installed in the Offenauer West penthouse, beside the other WCARC repeater/beacon equipment.

Many thanks to Phil-W8PSK, Tom-WE8TOM, Bob-WB8NQW, and Eric-WD8LEI, for their efforts to identify, purchase and install the new (used) repeater. Hopefully, we can expect to receive many future years of service from this unit, and the K8TIH repeater is back with its previous profile. ■

Field Day Plans

ARRL Field Day is a special activity for many hams, and has been quite popular with WCARC members for many decades. It is a unique event where Club members can work together to set up and then operate a joint radio station together. The basic idea is to see how well an amateur group can set up communications in the "field" preferably using emergency power sources.

Field Day is held over a two day (Saturday/Sunday) weekend at the end of June each year. This year, the event will be held on June 22/23 from noon set up on Saturday until tear down around 2 PM on Sunday.

Actual contacting begins at 2 PM on Saturday. Since Field Day goes on throughout the night on Saturday, many hams camp out in tents or campers while operating throughout late Saturday night/early Sunday morning.

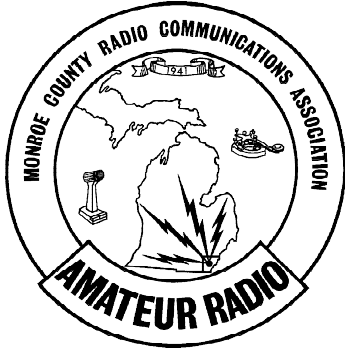
As has been the tradition for a number of years, our Club has reserved the use of the Wood County Historical Museum grounds to house our operations. These include the erection of antennas and setting up operating positions. For quite a few years, we have erected a large loop antenna for HF operation that utilizes the old oil derrick and several trees in the museum's infield. Other Club members set up their stations in or near their campsites. Most Amateur Radio clubs in

the US and Canada participate in Field Day, so the HF bands are usually full to the brim for the duration (none of the WARC bands: 30 m, 18 m or 12 m are used). VHF and UHF band FM simplex and SSB operation is also permitted, as well as many of the new digital modes. The typical exchange used by every station consists of a signal report, the club's call, operating class, which indicates power level and number of operators, and the ARRL section (OH in our case). As an example, if our Club had four separate set ups and operated on emergency power at or below 100 W, the class would be 4A.

Usually, weather permitting, the whole gang takes a break on Saturday evening to share a meal. This could include a pot luck dinner with grilled burgers and dogs, or simply ordering out for pizza.

Organizational and functional details will be finalized at the June Club meeting to be held at the Sheriff's Training Room at 7:30 PM on June 10th. If Field Day sounds like something you would like to participate in, please make sure you attend this organizational meeting.

Another aspect of Field Day that the ARRL feels is important is publicizing amateur radio to the general public. Our Field Day event has been publicized in many media, and we typically have a number of visitors to watch the operation. Extra contest points are awarded for having information about the Club readily available. ■



MONROE HAMFEST

and Computer Show

Father's Day - June 16, 2024

7:30am to 1:00pm - Set-up 6:30am Presented by:
The Monroe County Radio Communications Association

Monroe County Fairgrounds

M-50 at Raisinville Rd. (2 Miles west of Monroe)

FREE PARKING

Indoor Facilities / Trunk Sales

Computers and Equipment

Distributors / Hot Food

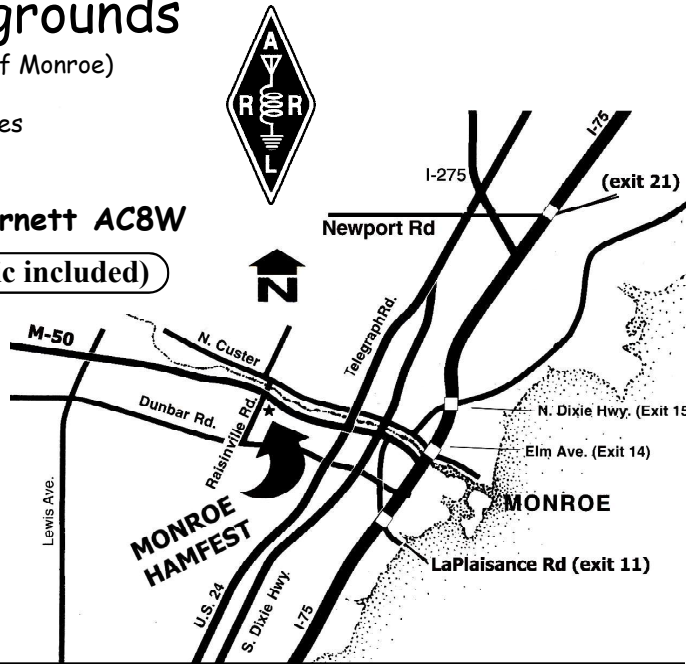
QSL Card checking by Stan Arnett AC8W

Over Night Camping \$40 (electric included)

Tables indoor 8': \$15 each, does not include admission ticket. Electric available in all buildings, bring cords.

Trunk 10' Spaces: \$10 each, does not include admission ticket.

Tickets Advance \$7 each.



Ticket, Trunk Sales, & Table Reservations online at: <http://www.mcrca.org>

Mail to: Fred VanDaele K8EBI, 4 Carl Drive, Monroe, MI 48162, ka8ebi@yahoo.com

Name _____ Call _____ e-mail _____

Address _____ City _____ State _____ Zip _____

Tickets _____ Trunk Spaces _____ Tables _____ Amount Enclosed _____

Advance Tickets \$7 ea. / 10 ft Trunk Spaces \$10 ea. / 8 ft Tables \$15 ea.

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

