MARCH 2014 VOLUME B14 · ISSUE 1

WOOD COUNTY AMATEUR RADIO CLUB

PRESIDENT VICE PRESIDENT SECRETARY TREASURER WB8ABY WB8NQW N1RB KD8NJW AL MURRAY BOB WILLMAN BOB BOUGHTON JIM BARNHOUSE

HTTP://WCARC.BGSU.EDU

Minutes WCARC Meeting February 10, 2014

Present: N1RB-Bob, W8CNJ-Roger, K8LL-Stan, WB8NQW-Bob, K8BBK-Steve, WD8JWJ-Bill, WB8VUL-Hoot, KD8NJW-Jim

Meeting Called to Order with Pledge of Allegiance at 7:50 pm, presided over by VP Bob, WB8NQW.

Minutes from last meeting were approved unanimously. Treasurer's report approved unanimously.

Old Business:

- Bob (NQW) reported that he has already "penciled in" a reservation for the Club to use the County Historical Museum grounds on Field Day, June 28/29, and sought formal approval. Motion to approve by Bob (RB), seconded by Bill (JWJ). Motion passed unanimously.
- Bob (NQW) also asked for volunteers to head up various committees for Field Day. Steve (BBK)

and Phil (PSK) will organize the antennas and Bob (RB) will round up radios for the event. We still need someone to head up the food committee.

- Steve (BBK) commented on the kick-off banquet by expressing his satisfaction. He suggested that it would be nice in future to have larger tables if possible so that more people could interact with each other.
- Jim (NJW) reported that he has the forms ready for the gratis table at the TMRA hamfest in March, but wanted to know if electricity were needed or not. Consensus of the group was to go with no electricity.

New Business:

 Bob (RB) mentioned the scheduling of a VE exam session for Saturday, March 1, at 1:30 pm in the Sheriff's Training room. All members are requested to contact any likely candidates to take the exam at that time. The current fee is \$15. Adjournment at 8:15

Net Check Ins

Jan 28 Traffic: 0 KD8NJW (NC) K8BBK N1RB WD8JWJ KG8FH KD8VWU WD8LEI WB8NQW WB8ABY KD8UHO/M N8YAE (11)

- Feb4Traffic: 0N1RB(NC)WB8ABY/MK8BBKKG8FHWD8LEIWB8NQWKD8VWUKD8NJWN8YAE(9)
- Feb11Traffic: 0K80V0(NC)WB8ABYN8YAEKD8VWUKD8NJWWD8LEIWB8NQWK8BBKN8PYAKD8DUX/M(10)

BRAIN TEASERS

- **1.** What does a capacitor do?
 - **a.)** stores energy electrochemically and opposes a change in current

b.) stores energy electrostatically and opposes a change in voltage

c.) stores energy electromagnetically and opposes a change in current

d.) stores energy electromechanically and opposes a change in voltage

2. What does an inductor do?

a.) stores energy electrostatically and opposes a change in voltage

b.) stores energy electrochemically and opposes a change in current

c.) stores energy electromagnetically and opposes a change in current

d.) stores energy electromechancially and opposes a change in voltage

- 3. What would you use to connect a dual band antenna to a mobile transceiver which has separate VHF and UHF outputs?
 - a.) dual needle SWR meter
 - **b.)** full duplex phone patch
 - c.) twin high pass filters
 - d.) duplexer

March Contests

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

0000 to 2359 Z	160 m to 10 m
	SSB
1900 to 1900 Z	80 m to 10 m
	all modes
11800 to 0100 Z	80 m to 10 m
	all modes
1200 to 1159 Z	160 m to 10 m
	all modes
1400 to 0200;1200 to 2400 Z	160 m to 10 m
	all modes
1300 to 0100; 1300 to 1900 Z	80 m to 10 m
	all modes
1400 to 0200 Z	160 m to 10 m
	all modes
0000 2359 Z	160 m to 10 m
	SSB
	0000 to 2359 Z 1900 to 1900 Z 11800 to 0100 Z 1200 to 1159 Z 1400 to 0200;1200 to 2400 Z 1300 to 0100; 1300 to 1900 Z 0000 2359 Z

March Hamfests

Mar 16 Toledo Mobile Radio Association, Hamfest and Computer Fair, Owens Community College, Perrysburg, OH. Contact Brian, WD8MXR, (419) 385-5624.

e-mail: <u>wd8mxr@gmail.com</u>

web: <u>http://www.tmrahamradio.org</u>

How's Propagation on the Bands?

There are a number of tools that hams use to assess propagation conditions. Most sources give the general conditions and maximum useable frequency (muf) for any period during the day. But what about the conditions to and from your very own QTH on a particular band using your very own transmitter and antenna?

An impressive set of software has been developed by K1JT to continuously detect and display the conditions on any band of your choice and by using your equipment. K1JT is Joseph Taylor, a radio astronomer at Princeton University. These folks are in the business of detecting extremely faint signals that are buried in noise and come to us from outer space. As a ham, Joe thought it would be interesting to apply some of the weak signal techniques that he uses professionally to our hobby. Among other weak signal applications, he developed a program called Weak Signal Propagation Reporting (WSPR) that enables any ham with a sound card interface to his transceiver to sample the propagation success of his signals anywhere in the world. The system depends on a world wide network of hams all who participate in WSPR.

The method works like this: After choosing the band of interest

and tuning up your transceiver and antenna to transmit on the designated frequency for that band, your station sends out a weak signal (5 W or less) for a two minute stretch. You then listen for a number of two minute periods, after each of which any detected WSPR signals are decoded. The usual ratio is four receive periods to one transmit period. After a short while, if there is propagation to anywhere, you will have a listing of the stations that your receiver has picked up. What's even better is that you can see who has received your signal by looking at the propagation map at http:// wsprnet.org/. It can show the stations located anywhere in the world that have heard your signal over a specified elapsed time frame. There is also an activity page that records your call (if heard) and the average frequency reported for your transmissions.

In order for this weak signal technique to work, both frequency and timing must be relatively precise. Most modern transceivers have sufficient frequency stability and accuracy for WSPR. Timing is another question. Most computers check some time source on a daily basis to refresh their clock accuracy. This is not good enough for WSPR. If you are running Windows in any form, you will need to download an other application called Dimension-4 that re-adjusts your

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WC	ARC	C Weekly Net	
Tuesdays at 2130 EDST/			
2030 EST (0130 Z)			
14	7.18	MHz 67 Hz PL	
Net Control Roster			
Feb	25	KD8NJW	
Mar	4	N1RB	
Mar	11	K80V0	
Mar	18	WB8NQW	
Mar	25	KD8NJW	
Apr	1	N1RB	
Apr	8	K80V0	

NEXT MEETING Breakfast meeting

Saturday, March 1st TIME: 9:00 am PLACE: Frisch's Big Boy North N. Main St. & E. Poe Rd. Bowling Green, OH

propagation---from p. 4

computer clock every half hour. Below is a map of the propagation on 10 meters from N1RB on a morning in early February. The set up is a Kenwood TS-2000 running 5 W with a 3 element tri-bander beam up about 40 feet. The interface is a Signalink USB to an iMac computer running Windows 8.

As you can see, the ten meter propagation seems to be really good to Europe and possibly to South Africa and South America. You can also observe good propagation to the US west coast and a cluster in the Eastern half of the country (skip zone over CO?). There is WSPR ac-

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DON'T FORGET!

10 meter informal

net meets Sunday

@ 2030 EST/EDST

on 28.335 MHz

Net Check Ins continued	It's
Feb 18 Traffic: 0	
WB8NQW (NC) NM8W	
KD8NJW KG8FH	Bowlir
WB8ABY N1RB	senior/
N8YAE (7)	regular
	family

It's time to renew !dues for 2014payable to:payable to:WCARCP.O. Box 534Bowling Green, OH 43402senior/student\$10.00regular\$20.00Brain Teaser answers: 1-b, 2-c, 3-d

propagation---from p. 5

tivity on every ham band with the majority being on the hf DX bands.



AM propagation from N1RB on 10 meters WSPR is a useful way to check what's happening on 6 meters, for example. The interesting thing about WSPR is that if you listen on

frequency, nothing is heard except perhaps a faint tonal hiss. To download the WSPR application, go to: http://physics.princeton.edu/pulsar/ K1JT/wspr.html.

You should be able to be up and running in no time. If you want more information on some of the weak signal modes now gaining interest, see Steve Ford's article "Real Signal Reports in Real Time" on page 49 of the February, 2014, edition of QST. Steve goes over all of the weak signal modes, including JT65, which enables you to engage in QSOs via weak signal techniques. ■

Skywarn Training Offered

The annual meeting for Skywarn training in Wood County will be held on Wednesday, March 26, at 6:00 *continued---on p.* 7

Skywarn---from p. 6 competition, logs must be submitted pm. Skywarn is a cooperative effort through the Logbook of the between the National Weather Serv-World (LoTW) system. ice (NWS) and the Amateur Radio W1AW will be on the air from Emergency Service (ARES) to spot every state and most territories, and tornadoes and other severe weather it will be easy to work WAS working events and to report them quickly only W1AW portable operations. and accurately. The location for the This is the first ARRL-sponsored opmeeting is: erating event where every member is worth at least one point, so work Elmwood Schools Community Center as many points as you can during 7650 Jerry City Rd. 2014! Earn awards based upon Bloomdale, OH points, working all states or working W1AW portable in every state and This session will be led by a meteterritory. This is an on-the-air event orological expert from the NWS who like no other. will provide information and sugges-The portable operation of W1AW tions for spotting and identifying the has already started with week-long nature of severe storms. If you QTHs in North Carolina, South Carohave an interest in public emergency lina, Utah, Virginia, Nebraska, Delaservice via ham radio through ARES ware, New York, Oklahoma, Minneand Skywarn, this is a "must-go" sota, Texas, Georgia, Hawaii, Calipresentation to attend. fornia, Wisconsin, Michigan, Florida, Washington, and Kansas. The plan **Centennial QSO Party** is to operate from each state twice adapted from ARRL Letter during the Centennial year, 2014. The ARRL Centennial QSO Party The QTH changes on Wednesday of is a year-long operating event that each week for the two portable celebrates hams making contacts. In W1AW operations. For example, the end you will have accumulated you should be able to contact points, worked new stations and W1AW/8 and W1AW/4 up through made new friends all over the world. February 25. The stations make it a The Centennial QSO Party is point to cover all bands and all the made-up of two main activities: (1) common modes of operation. W1AW operating portable in each For those of us who are awards state and most territories; and (2) chasers, this year gives us a chance The Centennial Points Challenge to go for Worked All States by workwhich is the accumulation of points ing only W1AW, the ARRL official from qualifying contacts made There are other special station. throughout 2014. To have a score awards offered, so give it a try! listed online in the Points Challenge

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