CQ Chatter

Volume B6•Issue #11 **Wood County Amateur Radio Club** **DECEMBER 2005**
P. O. Box 534,Bowling Green, OH 43402 **http://wcarc.bgsu.edu**

President/Vice President	**W8PSK/K8BBK**	**Loren Phillips /Steve McEwen**
Secretary	**N8MSU**	**John Gruber**
Treasurer	**WD8JWJ**	**Bill Wilkins**

Minutes
Wood County Amateur Radio Club
November 14, 2005, 7:30 pm
Sheriff's Training Room,
Justice Center, Bowling Green, Ohio

Attending: J. W. Frey, KD8BOH, Paul Perry, W8QZK, Bob Willman, WB8NQW, Fred Leetch, N8CWJ, Chuck Dicken, WD8ICP, Bill Wilkins, WD8JWJ, Esther Creps, N8OMV, Rolland Creps, Hoot Gibson, WB8VUL, Loren Phillips, W8PSK, Steve McEwen, K8BBK, Robert Bowers, KC8RWI, Charles Akers, KB8MXS, Brett Luna, KC8UMN, John S. Gruber, N8MSU

Steve McEwen and Loren Phillips, co-presidents, led the meeting. The minutes from the last business meeting (in September) were approved as published in the newsletter.

The last license class was discussed. Everyone passed the theory test, but, unfortunately, no one was yet able to pass the code test.

We are proceeding with the link to the ARES repeater. ARES is also getting a 2 meter repeater which will also be linked to their 440 machine. The new 2 meter frequency will be 146.390 MHz.

Chuck Dicken volunteered to serve as secretary next year.

WCARC Weekly Net:
Tuesdays at 2130
147.18 & 444.475 MHz

Next Meeting-
Breakfast
SATURDAY, December 3rd
At: Cousins' Restaurant,
Grand Rapids, OH
Time: 9:00 am

December Hamfests

Dec 4 **L'Anse Creuse ARC** 8:00 am Harrison Twp., MI, at L'Anse Creuse High School,. Contact David Herrington, N8NLK, (586) 465-2797. e-mail: *n8nlk@arrl.net*
http://www.n8lc.org

minutes-*continued*

We should consider whether to hold another class next year for those wishing to become technicians. Maybe February or March would be appropriate for a class which would last about 6 weeks. The scouts don't seem to be interested.

All WCARC members are invited to join Wood County ARES.

The next breakfast meeting will be Saturday, Dec. 3 at 9:00 AM at Cousins. The target for the holiday meeting is 6:00 PM on Monday, January 9, 2006. The group agreed to check into Charlie's in Perrys-

December Contests

The full contest lineup for the month of December includes the following:

Dec. 2-4 *2200 to 1600 Z* 160 m
ARRL 160 Meter 'test **CW**

Dec 10-11 *0000 to 2359 Z* 10 m
ARRL 10 Meter 'test **all modes**

Dec 10-18 *0000 to 0700 Z* 6 m on up
North American Meteor Scatter 'test

Dec 17 *0000 to 2359 Z* 160 m to 2m
RAC Canada Winter 'test **all modes**

Dec 17-18 *0000 to 2400 Z* 80 m to 6 m
PSK31 Death Match **PSK 31**

Dec 17-18 *1400 to 1400 Z* 160 m to 10 m
Croatian DX 'test **CW**

Dec 31 *0000 to 2359 Z* 160 m to 10 m
Straight Key Night **CW**

Brain Teasers

1. A ham on 40 meters gives you a report of "5 by 9". What does this mean?
a. top readability and strong signal
b. average readability and strong signal
c. average signal and top readability
d. strong signal and below average readability

2. The prosign QRZ? means:
a. I will answer anyone who replies to my call.
b. Is the frequency in use?
c. Who is calling me?
d. Can you wait a minute?

3. You want to talk to a friend in Cincinnati in the afternoon. The best band to use is:
a. 10 m **b.** 20 m **c.** 40 m **d.** 75 m

WCARC Net Control Roster

Net meets every Tuesday at 2130

Nov 29	**WB8NQW**
Dec 6	**N1RB**
Dec 13	**K8OVO**
Dec. 20	**WD8ICP**
Dec. 27	**N8QMV**
Jan. 3	**WB8NQW**
Jan. 10	**N1RB**
Jan. 17	**K8OVO**

WCARC Net Check-ins

Nov 22: N8QMV (NC), W8PSK, WD8JWJ, KC8EKT, KC8ZJW (5)

minutes-*continued*

burg (primary) and Cousins (backup plan).

Loren Phillips will take net control for tomorrow night (Nov. 15).

ARES is getting 4000' of cable and a number of dual band antennas for public service organizations that would like them.

The business meeting was then adjourned and the program commenced with Steve McEwen presenting "Antennas 101".

Program: "Antennas 101", Steve McEwen, K8BBK

The lower the frequency, the longer the antenna must be to resonate, but you can use coils to make the antenna shorter to fit a smaller space. Steve showed the group a relatively small antenna he used mobile to contact Croatia with 100 Watts. He made the point that you don't need a big antenna to work distant stations, so

minutes-*continued*

don't let anything stop you. If you are putting up a wire antenna, a half-wave antenna length can be calculated using the equation L = 468/frequency where the frequency is in Megahertz and the total length of the antenna (L) is in feet.

For example, 468/3.9 MHz is 120 feet so the total length of a dipole to work this frequency would be 120 feet. Traps can be added if you don't have the space or wish to work additional bands.

You can use your imagination when it comes to design and materials when constructing your antenna. Modern transceivers want to send radio waves into a 50 ohm load --so you should find a way to make the antenna look like a 50 ohm antenna, maybe using an antenna tuner, or the right length of wire to make the antenna resonant, or by using coils. You do want a SWR of less than 2.0.

Steve has used a measured hank of wire and some rope to put a temporary antenna out a window. You can use a folded dipole to reduce noise; the wire travels from the center feed point to one end, then to the other end, then back to the center feed point. Another advantage of this kind of antenna is that you can check it by checking for DC continuity from the shack and any physical break will show up.

Loops are fun, too, but if your antenna tuner is doing a tough match there is the possibility of big losses in a feed coax. A ladder line has low loss and may be a better choice for feed line in this situation.

Steve demonstrated using a light bulb as an antenna on 40 meters. A small HF receiver was able to pull in his voice, so though not necessarily very efficient, the light bulb indeed worked. Next he used a SWR meter and a pair of large resistors to show that resistors have a pretty flat impedance response to changes in frequency, unlike a real antenna.

For a ten meter frequency, say 28.5 MHz, the equation above yields 16.4'. He had a wire cut for 8'4"" on each end, he noted that it is better to start a little long and cut back since it is a lot easier to cut off wire than to add it.

Steve then demonstrated using a grid dip meter to test the resonance of the little wire antenna. The meter contains a little oscillator and uses a coil to set the range of the oscillators frequency. Steve wrapped the center of the wire around the coil on the grid dip meter. He got the meter to dip, showing resonance around 22 MHz. Bill Wilkins used the transceiver as a frequency counter to measure the resonance frequency with more precision. Next Steve cut off about 6" each side and moved the frequency of resonance to about 24 MHz. Another couple of inches and he got about 26 MHz. The frequency of resonance was probably off somewhat from what would normally be expected since the ends of the antenna were being held by volunteers.

Next Steve hooked the antenna to the antenna tuner, hooked it to the SWR meter, and hooked it to then transceiver. He showed the group how you would tune up the antenna in practice. Steve recommends looking at the ARRL antenna book for more ideas, and reminded the group once more that higher frequencies need shorter antennas, and that a shortage of space should be no excuse--put up an antenna and work the bands.

Happy Holidays

Brain Teasers answers: 1-a, 2-c, 3-d

Scenes from the Fort Wayne Hamfest

display floor

Some familiar faces (WD8JWJ and W8PSK) looking at their goodies

photos courtesy of Steve, K8BBK

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