

CQ Chatter

MAY 2014

VOLUME B14 • ISSUE 3

WOOD COUNTY AMATEUR RADIO CLUB

PRESIDENT

WB8ABY

AL MURRAY

VICE PRESIDENT

WB8NQW

BOB WILLMAN

SECRETARY

N1RB

BOB BOUGHTON

TREASURER

KD8NJW

JIM BARNHOUSE

[HTTP://WCARC.BGSU.EDU](http://WCARC.BGSU.EDU)

WB8ABY SK

Al Murray, WB8ABY, President of WCARC, passed away on April 12th. Al was an active amateur for many years and was President of WCARC twice, the two terms being separated by several decades.

As a young man, Al was a SCUBA diver and instructor. He held the brown belt in Tae Kwan Do. He served in the U.S. Army and was stationed at Fort Knox, KY.

Al worked at Libbey Owens Ford for over 51 years and was active as a member of Steelworkers Local #9. As a long time resident of Haskins, Al was a member of the Middleton Twp. Fire Department for 37 years and served as Fire Chief for 18 years. He worked with the NW Ohio Arson Task Force and with the Wood County Sheriff's Fire Investigation Unit.

We will all miss Al, but most especially his light-hearted personality and enthusiasm for meeting the challenges that the Club faces. ■

Minutes

WCARC Meeting

APRIL 14, 2014

Present: Bob-N1RB, Roger-W8CNJ, Thom-WB8ZHU, Bob-WB8NQW, Bill-WD8JWJ, Steve-W8MSW, Chuck-WD8ICP, Phil-W8PSK, Alec-KD8WKM, Hoot-WB8VUL, Don-K8OVO

Meeting Called to Order with Pledge of Allegiance at 7:30 pm and presided over by Bob, WB8NQW. Bob relayed the sad news of the passing of WB8ABY.

Minutes of February meeting as they appeared in the March newsletter were approved unanimously. No Treasurer's report was submitted.

Old Business:

- Bob asked for a volunteer to head up the food for Field Day. Phil, W8PSK volunteered to supervise the entire operation. He will work with Bob, N1RB, and Steve, K8BBK, who had previously volunteered.

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Net Check Ins

Apr 1 Traffic: 0

N1RB (NC)
WD8LEI/P
WB8NQW
WD8JWJ
N8VNT
KD8VWU
KD8RNO
KD8WSM
K8BBK
KD8UHO
N8YAE (11)

Apr 8 Traffic: 0

K8OVO (NC)
K8BBK
W8PSK
KD8VWU
WD8JWJ
KD8NJW
WB8NQW
KD8RNO
WD8LEI
N1RB
KF7SON
N8PYA
N8VNT (13)

BRAIN TEASERS

1. What determines the velocity factor of a transmission line?
 - a.) the termination impedance
 - b.) the line length
 - c.) dielectrics in the line
 - d.) the center conductor resistivity
2. What is the time constant of a circuit having two 100 microfarad capacitors and two 470 kilohm resistors all in series?
 - a.) 47 s
 - b.) 101.1 s
 - c.) 103 s
 - d.) 220 s
3. What pattern is desirable for a direction-finding antenna?
 - a.) one which is non-cardioid
 - b.) one with good front-to-back and front-to-side ratios
 - c.) one with good top-to-bottom and side-to-side ratios
 - d.) one with shallow nulls

May Contests

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

May 3-4	<i>11200 to 1159 Z</i>	160 m to 10 m
ARI (Italy) DX `test		all modes
May 3-4	<i>1300 to 0700 Z</i>	160 m to 10 m
7th Call Area QSO Party		all modes
May 3-4	<i>1600 to 0400 Z</i>	160 m to 10 m
Indiana QSO Party		all modes
May 3-4	<i>2000 to 0500;1300 to 2400 Z</i>	80 m to 10 m
New England QSO Party		all modes
May 10-11	<i>1200 to 1200 Z</i>	160 m to 10 m
CQ-M (Russia) DX `test		all modes
May 10-11	<i>1500 to 1500 Z</i>	80 m to 10 m
Portuguese Navy Day		SSB-CW
May 10-11	<i>1700 to 1700 Z</i>	160 m to 10 m
Nevada (Mustang) QSO Party		all modes
May 17	<i>0800 to 1500 Z</i>	80 m to 10 m
Portuguese Navy Day		digital
May 17-18	<i>1200 to 1200 Z</i>	160 m to 10 m
King of Spain `test		CW
May 17-18	<i>2100 to 0200 Z</i>	80 m to 10 m
Baltic DX `test		all modes
May 18	<i>1000 to 1400 Z</i>	40 m
Worked All Britain		SSB
May 24-25	<i>0000 to 2359 Z</i>	160 m to 10 m
CQ WW WPX `test		CW

May Hamfests

May 16-18 DAYTON HAMVENTION Hara Arena, Trotwood, OH. Contact Charles, KD8JZR, (937) 276-6930.

e-mail: info@hamvention.org

web: <http://www.hamvention.org>

Jun 1 Chelsea ARC Chelsea Fairgrounds, Chelsea, MI. Contact Frank, KD8ABW, (734) 945-1915.

e-mail: fpohs@gmail.com

web: <http://www.wd8iel.com>

minutes---from p. 1

- Looking forward to the time when we will need to move the repeater, Bob (N9W) offered a FYI about duplexers in that they have gone up in price considerably.

New Business:

- Bob (N9W) asked if it was time for organizing a foxhunt. Receiving no comments whatsoever, the issue was tabled for later consideration.

Meeting Adjourned at 7:55.

The meeting was followed by a very interesting Power Point presentation by WB8N9W on old natural gas powered engines. ■

Backscatter

from May, 1980 CQ Chatter

"Hear and There"

Impossible for Bob Dickey, WD8LEH, and President Roland Gill, WD8KLG, to carry on a conversation

through their big grins now that they are both advanced class--- believe it or not, Hoot Gibson, WB8VUL, finally got his Kenwood TS-520S on the air. Lots of help from Donn Foltz, WD8JYE, Bill Wilkins, WD8JWJ, Roland Gill, WD8KLG, and Bob Willman, WB8N9W, who tuned in to learn if it was true. Even got a good signal report. Not bad for an attic circular polarized half-wave, all-wave dipole. (Figure that one out)---Donn Foltz, WD8JYE, hit it big time on TV-11, April 11 when interviewed about Farmer loans. Claims he was not adequately quoted due to some rapid tape editing. (As a former military type involved in a few such episodes with the press, the editor believes his comments.)--- Hoot Gibson, WB8VUL, recently took a week vacation in the Michigan Upper Peninsula. Headed west out of Marquette, he had a great 2 meter conversation

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WCARC Weekly Net

**Tuesdays at 2130 EDST/
2030 EST (0130 Z)**

147.18 MHz 67 Hz PL

147.18 MHz 67 Hz PL

Net Control Roster

Apr 29	N1RB
May 6	W8PSK
May 13	K80VO
May 20	WB8NQW
May 27	KD8NJW
Jun 3	N1RB
Jun 10	W8PSK

NEXT MEETING

BREAKFAST MEETING

Saturday, May 3rd

TIME: 9:00 am

PLACE:

Frisch's Big Boy North

E. Poe Rd. &

N. Main St.

Bowling Green, OH

DON'T FORGET!

10 meter informal net meets Sunday

@ 2030 EST/EDST on 28.335 MHz

backscatter---from p. 4

with Marty, WA8CWC, on board the Great Lakes ore freighter, George M. Humphries, in the middle of Lake Superior headed for a Minnesota ore port---Bob Holland, WB8VUL, is recovering at home from surgery to remove a bone spur from his elbow. He's mobile but not too comfortable.

■

WCARC Field Day

Set-up: around noon

Saturday, June 28

Location: Wood Co.

Historical Museum

stay tuned for further details

Net Check Ins continued

Apr 15 Traffic: 0

WB8NQW (NC)
K8BBK
W8PSK
WD8JWJ
N1RB
KD8VWU
KD8RNO
KD8NJW
WD8LE/P
KD8FRL
KD8WZK
KB8THM (12)

Apr 22 Traffic: 0

KD8NJW (NC)
W8PSK
K8BBK
N8VNT
WD8JWJ
WB8NQW
KD8VWU
KD8FRL
K8OVO (9)

Brain Teaser answers: 1-c, 2-a, 3-b

Dongle Bits - II

contributed by Jeff Kopcak, K8JTK

One of the questions I was asked about the Raspberry PI was "why would I want to get one of these?" I can say with absolute certainty: the answer isn't going to be the same for everyone. My recommendation is to find a project that really gets you excited! Go out and do it. Then do it better. Make it a learning tool as it was intended. The hardware, operating system, and many projects are published under the Open Source model.



The concept of Open Source is something that can be freely used, changed, and shared. This means YOU can download a project and "hack" it yourself. From there, explore other projects or prototype one of your own!

In my previous article, I mentioned two ways to find projects. For an initial project, I suggest finding something that has a good amount of detail in the instructions. This way you won't be frustrated if they are vague or unclear. Projects with videos and screen-shots are always helpful for me to visualize what is taking place and I'm able to check my settings with theirs. On the other hand, if the project doesn't work, it's a great opportunity to sharpen troubleshooting skills.

continued---on p. 7

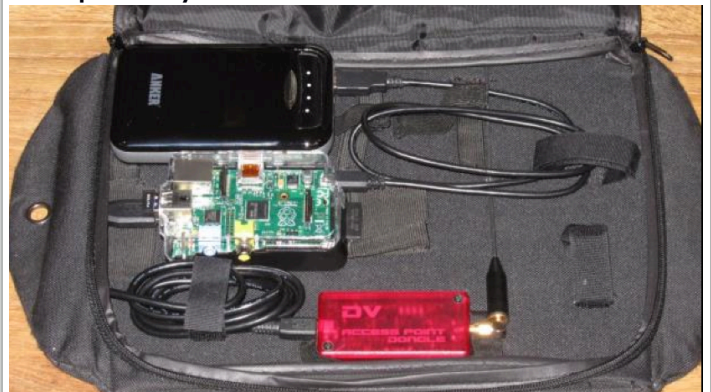
dongle bits---from p. 6

After finding out about the Raspberry Pi and seeing projects appearing in blogs and podcasts, the project that got me excited was the "DVAP Pi Hotspot." If you're on D-STAR, you probably know about a couple dongles that make D-STAR available to you if there is not a repeater nearby. These dongles traditionally need a PC computer, USB connection, and Internet connection to access the D-STAR network. The blue box is called the "DV Dongle." It is D-STAR in a box. It uses your computer speakers and microphone for sending and receiving Digital Voice (DV). This dongle does the encoding and decoding internally. I don't know of any Raspberry Pi projects using the DV Dongle yet. The second is the red box called the "DV Access Point Dongle" or DVAP. This device has a low power, 10 mW 2m or 440 transceiver that works with a D-STAR radio. It passes the bits from the Internet & D-STAR network over the air to your D-STAR radio and vice versa. The radio does the encoding and decoding. These devices are great for traveling as they can be hooked to a laptop and used in a hotel room to link back to your home repeater or favorite reflector.

I had been hearing about this DVAP Pi Hotspot on D-STAR nets. Two advantages were: the unit was self-contained, making it no longer

necessary to keep a desktop computer running with the DVAP connected. Since the Raspberry Pi draws far less power than a desktop, some were leaving their DVAP Pi running all the time. The second advantage was it could be easily converted into a mobile setup.

I follow the guys over at AmateurLogic.TV. They're the longest running podcast dedicated to Amateur Radio and technology. In episode 60, Tommy, N5ZNO, did a segment on [how he setup his DVAP Pi](#). The project seemed easy enough and the setup was just like how I wanted mine to operate: "headless" where the app starts automatically so a video monitor is not required, has SSH (Linux Secure SHell) enabled, and connects to a mobile hotspot. Soon after seeing the segment, I ordered my Raspberry Pi.



I completed the project and got it up and running in short order. Wow! I was so amazed I got to experiment with this small, but powerful computer and have a

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dongle bits---from p. 7

portable D-STAR hotspot I can take with me anywhere. Using a cell phone for the Internet connection, I am limited to the coverage area of my cell phone provider, big red. Their coverage is very good and I don't have many disconnects. I use a portable charging station (fancy word for "battery pack") as the power source. The pack has 2 USB ports so I can run the Raspberry Pi and charge my cell phone at the same time. I've also used my 1A micro-USB car charger to power the Raspberry Pi. If the setup is on a home network, there is no need to worry about cell coverage or a portable power source.

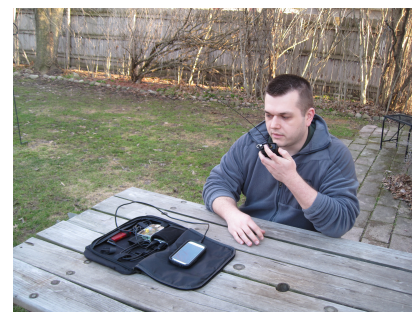
I'll leave the video tutorial to Tommy. I did a detailed [post on my site](#) that shows, step-by-step, how I set mine up. It's a little more advanced than Tommy's setup but it fixed an issue I was having.

When I booted the Raspberry Pi and tried to link the DVAP to a gateway, I frequently got a "gateway unknown" error message. This error means the remote D-STAR system doesn't exist or is offline. However, neither was the case. The problem was the DVAP software was not able to authenticate my call sign with the D-STAR authentication servers. This happened because the WiFi interface wasn't fully operational before the DVAP software tried to

log me in. I was running into this error enough for it to be frustrating. Usually a reboot would work, however a few times I had to reboot 3 or 4 times. I fixed the issue with a Linux shell script (like a DOS batch file) to make sure the Internet was accessible before the DVAP software is started. Voilà, fixed my problem! :)

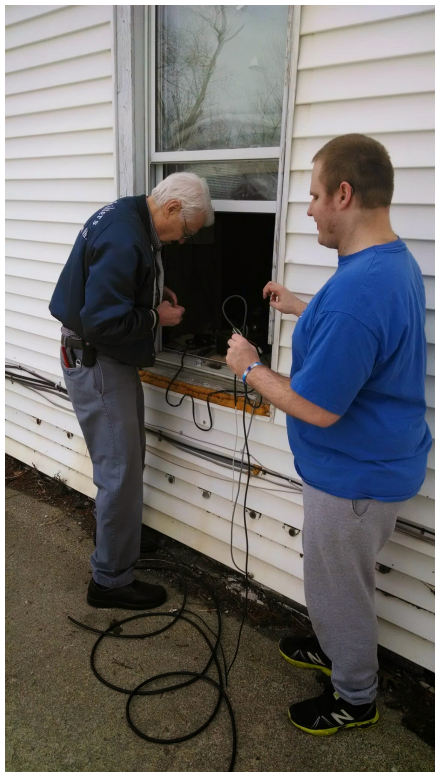
Additionally, I added to the setup by installing VNC. VNC (Virtual Network Computing) is a way to view and control the graphical desktop of the Raspberry Pi (or any computer) over a network connection. Since there are SSH and VNC applications for smartphones, I am able to fully control the Raspberry Pi from my phone with it connected to the WiFi hotspot application.

That's the first project I did with my Raspberry Pi. I've done a couple other projects and see some other ones I would like to try out. Right now, I mostly use my Raspberry Pi as a DVAP hotspot. Next time, we'll take a look at how other hams are using microcomputers in their projects. If you have any projects using the Raspberry Pi, Arduino, Galileo, BeagleBoard/Bone, or any others, let me know: K8JTK@ARRL.Net ■



An Old Fashioned Antenna Party at QTH of KD8VWU

photos courtesy of WD8LEI



feed line installation
Steve-K8BBK,
Doug-KD8VWU
and Doug's mother, Betty



the finished product
Eric-WD8LEI making final
connections on the roof ->



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