CQ Chatter

Minutes
WCARC Meeting
June 9, 2014
Bob-WB8NQW, presiding
Present: Bob-N1RB, Jim-KD8NJW, Lee-KD8NVW, Loren-W8PSK, Orville-KC8NKC, Stan-K8LL, Hoot-WB8VUL, Don-K8OVO, Bob-WB8NQW, Bill-WD8JWJ, Tom-KC8IGZ

Meeting Called to Order with Pledge of Allegiance at 7:30 pm. Bob called for a moment of silence to commemorate the passing of Al-WB8ABY.

Old Business:
- Bob (NQW) reported that he is working on upgrading the Club's Silent Key plaque. There are a total of 5 new plates on order.
- Phil (PSK) reported on preparations for Field Day activities. The event will begin around noon on Saturday, June 28th with antenna raising. Main course will be provided by K8OVO's XYL. Everyone should bring a side dish and his own beverages other than water, which is furnished.
- Bob (RB) requested anyone who will bring their radio to let him know at boughton@bgsu.edu. The Club's own Kenwood TS-440 will be available, but two or more other transceivers are desired so we can work class 3A.
- Bob (NQW) asked if there was any interest in holding a foxhunt. Bob (RB) moved that we hold one after the September breakfast meeting (Sept. 6). Motion passed. Bob agreed to serve as the fox.
- Bob (NQW) commented that we are always looking for more net controllers. If anyone is interested, contact any of the officers.

New Business:
- Bob (NQW) reported that about half the WA8SCT equipment list has been sold. He also still has a lot of tubes to dispose of.

Net Check Ins

BRAIN TEASERS

1. If the maximum usable frequency (muf) on the path from Ohio to Germany is 17 MHz, which band should offer the best chance for a successful contact?

   a.) 80 m   **c.)** 20 m
   b.) 40 m   **d.)** 2 m

2. Which of the following most limits the effectiveness of an HF mobile transceiver operating in the 75 meter band?

   a.) vehicle's electrical system wiring
   b.) wire gauge of DC power to transceiver
   c.) HF mobile antenna system
   d.) rating of vehicle's alternator

3. Why isn't frequency modulated (FM) phone used below 29.5 MHz?

   a.) transmitter efficiency for FM is too low
   b.) harmonics cannot be attenuated to practical levels
   c.) bandwidth would exceed FCC limits
   d.) frequency stability would not be adequate

July Contests

The contest lineup for the month of July is given below. Please note that the WARC bands (60, 30, 17 and 12 m) are _never_ open to contesting.

Jul 1	_0000 to 2359 Z_	160 m to 10 m
Canada Day 'test		**all modes**
Jul 5-6	_1100 to 1059 Z_	80 m to 10 m
DL (Germ.) DX RTTY 'test		**RTTY**
Jul 12-13	_1200 to 1200 Z_	160 m to 10 m
IARU HF Championship		**all modes**
Jul 19-20	_1800 to 2100 Z_	6 m, 2m
CQ WW VHF 'test		**all modes**
Jul 19-20	_1800 to 0600 Z_	80 m to 10 m
Kids Day		**SSB**
Jun 28-29	_1200 to 1200 Z_	80 m to 10 m
North America QSO Party		**RTTY**
Jul 26-27	_1200 to 1200 Z_	80 m to 10 m
RSGB IOTA 'test		**all modes**

July Hamfests

Jul 19 Northern Ohio ARS. Annual hamfest. Lorain County Community College, Elyria, OH. Contact Darlene, KA8VTS, (216) 398-8858.
e-mail: dohman@roadrunner.com
web: http://noars.net

Aug 9 Land of Lakes ARC. Annual hamfest. Angola Community Church of the Nazarene, Angola, IN. Contact Steve, N9YK, (260) 665-3463.
e-mail: N9YK@arrl.net
web: http://www.llarc.org

Ohio's New Amateur Radio Antenna Law

from ARRL Ohio Section

Background

The FCC has adopted regulations protecting the right of radio amateurs to erect and maintain antennas. The FCC regulations have the force and effect of federal statutes and are binding on the states as well as agencies of local government, including local zoning authorities. These regulations contain three general requirements: 1) local zoning authorities may not prohibit amateur radio communications; 2) local zoning authorities must provide reasonable accommodation for amateur radio antenna requests; and 3) local land use regulations affecting amateur radio antenna facilities must constitute the minimum practicable regulation to accomplish a legitimate municipal purpose.

On August 15, 2012, H.B. 158 (129th General Assembly) became law in Ohio. That law applies to all city, township and county zoning authorities and codifies Ohio's recognition of the Federally protected rights of Ohio amateur radio operators to erect antennas. The law requires that local zoning authorities " ..not restrict the height or location of amateur station antenna structures in such a way as to prevent effective amateur radio service communications…"

The law also imposes affirmative obligations on local zoning authorities to provide "reasonable accommodation" for amateur radio antennas and limits regulation to the "…minimum practicable regulation necessary to accomplish the legislative authority's purpose".

The duty of zoning authorities to provide "reasonable accommodation" for ham antennas is underscored by the obligation of the zoning authority to bear the burden of defending its actions in the event of appeal.

Permit and Variance Decisions

The concept of "reasonable accommodation" as required by both Ohio and Federal law is based on the unique circumstances of each request. For example, the optimal height of some amateur antennas will be a function of the frequencies on which the antenna is designed to operate. The following suggestions convey the intent of the laws as applied to some of the more common zoning issues.

- *Tower Height*
  Many amateur activities can be accomplished with an antenna height of 75 feet above ground. Other applications may require a greater height.
- *Setback Limitations*
  The size of an amateur's lot should not dictate the configuration of his or her antenna installation. Properly engineered and installed antenna support structures

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WCARC Weekly Net

Tuesdays at 2100
LOCAL TIME ALL YEAR
147.18 MHz 67 Hz PL

Net Control Roster

Jul	1	KD8NJW
Jul	8	N1RB
Jul	15	W8PSK
Jul	22	K8OVO
Jul	29	WB8NQW
Aug	5	KD8NJW

NOTE TIME CHANGE!!

NEXT MEETING

BREAKFAST MEETING

Saturday, July 5th
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

Ohio Antenna Law Challenge May Be Over

from Delara (Delaware ARA) News

In a surprise move, the Ohio Sixth District Court of Appeals has dismissed an appeal from the Village of Swanton, Ohio, in an Amateur Radio antenna zoning case. The ARRL had announced plans to file a "friend of the court" or *amicus curiae* brief on behalf of ARRL Life Member Gary Wodtke, WW8N, who has been trying since 2009 to erect a 60 foot antenna support structure on his 0.2 acre residential lot. It now appears that he will be able to do so. The Village of Swanton, Ohio, has established a fixed antenna height of 20 feet above the residential roofline, and it turned down Wodtke's antenna variance application for the taller structure. On ap-

Net Check Ins
continued

Jun   24   Traffic: 0

W8PSK   (NCS)
K8BBK
KD8VWU
N1RB
KD8RNO
KD8WZK/P
N8VNT
K8OVO
N8PYA
WD8JWJ   (10)

Brain Teaser answers: (G) 1-c, 2-c, 3-c

will survive winds that could destroy other structures in the areas. "Reasonable accommodation" of an amateur antenna request should take all of these circumstances into account, and may not simply be rejected by rote application of a formula based on lot size.

- *Interference*
The FCC has exclusive jurisdiction to address radio interference issues. Thus, interference is not a consideration for State or local authorities.

- *Aesthetics*
The fact that some may consider amateur radio antennas unsightly does not diminish the legally protected right of the radio amateur to have antennas. Antennas can, however, be sited on residential lots in such a way as to minimize any negative aesthetic impact.   ∎

WA8SCT (SK) Equipment For Sale
message from Bob-WB8NQW

Before Jim Ryan, WA8SCT, passed away, he asked me to dispose of his radio equipment and that he wanted the Club to get a percentage of the proceeds. On page **11** is a spreadsheet with the list of remaining equipment from his estate, along with the suggested prices that we established. This amateur gear was well taken care of and looks great, but we have not tested every item. We also have the manuals for most of the Heathkit items. The Club will get a significant percentage of the purchase price listed. Some of the equipment is at my QTH and some is at the QTH of Bill Wilkins, WD8JWJ, and on-site inspections can be arranged if you wish.

We do not want to make this a long drawn-out process, so if you want to purchase any item on the list, please contact me as soon as possible: first come-first serve, at blcksmth@wcnet.org. After July 07, 2014, we will start to advertise whatever is left outside the WCARC.

I also have several hundred different tube types that Jim had in his shack. We may try to include spare tubes with some of the Heathkit gear if we can. If you need tubes, let me know what type you need and I will let you know if I have it.   ∎

peal, Wodtke in January won a final judgment in his favor in the Fulton County Common Pleas Court. The court ruled that Federal and State law pre-empted Swanton's antenna ordinance.

The Appeals Court ruling on April 3 was based on the fact that the trial court decision the Village could have appealed was issued on August 20, 2013, while the judgment that the Village attempted to appeal was issued on January 21, 2014. Since the August 20 trial court decision was a final order, the Village was required to file its appeal within 30 days, and it never did so, thus losing its right to appeal. The ruling means that the August 20 trial court decision stands, and Wodtke wins the right to erect the tower for which he applied.

The award of attorney fees appears to be at the center of confusion on both sides of the case. The trial court's decision last August 20 awarded attorney fees to Wodtke. Because attorney fees had not yet been determined, both sides considered the decision as not yet final. But, while Wodtke's attorney had sought attorney fees in his original complaint, the amended complaint that the trial court ruled upon last summer included no such request.

The Court of Appeals said that, ordinarily, when attorney fees are requested in a complaint but not yet ruled upon, the order disposing of the rest of the case is not final and appealable, but the court pointed out that a claim for attorney fees was not pending once court entered its August 20 judgment. "Therefore, the order was final and appealable on August 20, 2013," the court said.

The Court of Appeals also noted that, although both sides had filed for reconsideration of the August 20 decision, neither of those motions nor the trial court's January 21 decision had the effect of extending the appeal deadline. In the words of the Court of Appeals, "It is well settled that a motion to reconsider does not stay the time to file a notice of appeal." The Court of Appeals' April 3 decision could yet be reviewed by the Ohio Supreme Court, but only if the Village had filed a timely *Memorandum in Support of Jurisdiction* to convince the high court to hear the appeal.

Ohio Section State Government Liaison Nick Pittner, K8NAP, believes the Appeals Court decision in Wodtke v. Village of Swanton could set legal precedent for similar antenna-related cases down the road. An attorney, Pittner was instrumental in getting Ohio's PRB-1 law enacted. "The Ohio Municipal League seems intent on challenging [the PRB-1 law] in court, and will likely try to do so in some other case if the challenge is not available in this one," Pittner said. "We're keeping the research files open." ∎

Dongle Bits - III

contributed by Jeff Kopcak, K8JTK

We're going to take a look at projects others have done with microcomputers and controllers. Many of these will be Amateur Radio related but I will highlight some getting started projects that show setup or basic programming. Since many Hams are into computers and programming, I will highlight some networking and server related uses. Finally, some of the more some crazy and unique setups I've come across.

First thing to note: if you receive this newsletter in printed form, you'll want to go to the club's website or get it in electronic form to view these links. Links will be to videos or instructions posted online. Any YouTube videos will start at the beginning of the segment.

Getting started tutorials

- Setup your Raspberry Pi.
- Programming your first Arduino project.
- Repairing a smoked Arduino.

Ham Radio
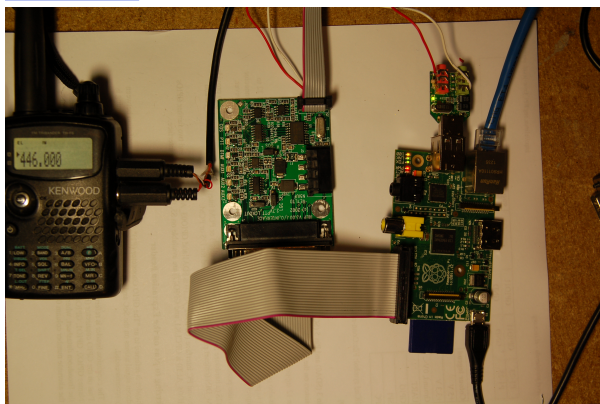
I was informed the University of Akron Amateur Radio Club (W8UPD) was planning on using the Raspberry Pi for their second High Altitude Balloon launch on April 8, 2014. Though no reason was given, it was scrapped for the Beaglebone Black board. They configured it to send back Slow-scan TV images overlaid with telemetry information. Unfortunately, the launch was a failure due to high winds and "poorly placed trees." Upon launch, the payload got snagged and caught in a tree.

I heard from John – N8MDP who setup his Raspberry Pi as a D-STAR hotspot as well. His setup works with the "X-Reflector" system. There are multiple D-STAR reflector systems that co-exist together on the network. His instructions are detailed and the setup is different than mine because different software is needed to access these alternative reflector systems. John installed a webserver on his Pi to control it from the Internet.

Raspberry Pi

- PiIRLP. IRLP on the Pi.

- EchoLink (part 1) (part 2). Later they stated there are still issues. Stay tuned.
- TNC-Pi (part 1) (part 2) which comes as a kit to build. APRS was used in the demonstration.
- Mobile Xastir based APRS station.

- [PSK31](#).
- [Repeater controller](#) with web interface. This is still in development.
- [DVAP Pi](#) which I've mentioned previously. There is a [DHAP](#) (Digital HAM Access Point) which is a DVAP Pi in a hardened case.

Arduino

- ID timer ([part 1](#)) ([part 2](#)) that will remind you to ID with your call sign every 10 minutes.
- [Foxhunt transmitter](#).
- [Heads-up display](#) in a mobile setup for radios that use CAT commands.

Networking and server

One of the first projects I saw was how to use the [Raspberry Pi as a Home theater PC](#). This allows you to watch videos, listen to audio, or display photos accessible via the network on a TV.

A Pi can be turned into a home or portable access device used in conferences, competitions, demonstrations, or school project. Some examples are a [router](#), [network attached storage (NAS) device](#), [web server](#), or secure [virtual private network (VPN) server](#). The VPN server uses OpenVPN, an excellent encryption package that offers trust no one (TNO) encryption since you generate the encryption keys.

A useful project is the [Raspberry Pi IP address IDer](#) which speaks the IP address if you are operating headless and need to connect to it.

Cool and unique

Want to relive the 8-bit gaming days of the Commodore 64? There is a project called [Commodore Pi](#) to create a native Commodore 64 emulator and operating system for the Raspberry Pi.

Build a [coffee table gaming rig](#).

Turn a Raspberry Pi into an [FM transmitter](#).

If you like cheap phones, for $160 you can create your own [Raspberry Pi smartphone](#).

Want to give your dog a treat via email? The [Judd Treat Machine](#) will do just that! Send an email to the dog's email address, it dispenses the treat, snaps a picture, and replies with the picture attached.

The University of Southampton in England created the [Raspberry Pi Supercomputer](#) using 64 Raspberry Pi computers. They use a "message passing" system to distribute processing across all 64 devices. His son also helped out by building the rack to hold them out of… Legos!

Other places for projects and news

- [Raspberry Pi forums](#).
- [Arduino forums](#).
- Slashdot: ([Pi](#)) ([Arduino](#)).
- Lifehacker: ([Pi](#)) ([Arduino](#)).
- Reddit: ([Pi](#)) ([Arduino](#)).
- Podcasts.
- Search the Internet!

Next time, we're going to move on to another type of dongle: the $20 software-defined radio. ∎

No New Rules Affecting 902-928 MHz Band

from ARRL Letter

The FCC has [terminated](#) a long-standing proceeding involving the 902-928 MHz (33 centimeter) band. In 2006, the FCC, in WT Docket 06-49, proposed rule changes to encourage development of the Multi-lateration Location Monitoring Service (M-LMS) -- a terrestrial service for location of objects and tracking. Amateur Radio is secondary in the band to federal radio-location systems, industrial, scientific and medical devices, federal fixed and mobile systems, and the M-LMS. This week, the FCC, with little fanfare, concluded that proceeding.

"Based on the record before us, and on recent developments pertaining to M-LMS operations in the 902-928 MHz band, we conclude that the various proposals for wholesale revisions of the applicable rules do not merit further consideration at this time". ∎

minutes---from p. 1

- Bob (NQW) responded to comments that the digital audio on the repeater is too loud by asking for opinions from the body. Phil (PSK) remarked that the Technical Committee can reduce the output if necessary.
- Stan (LL) suggested that the net meeting time be made uniform throughout the year. Bob directed that a questionnaire be placed in the newsletter to query the Club members.

Meeting Adjourned at 8:08 pm.

The meeting was followed by a demonstration by WD8JWJ of his latest code reader kits. The first was the K1EL K42 Keyboard Morse Keyer/Decoder and the other was the Microcode Morse Reader which is based on the Arduino microprocessor board. Bill demonstrated the code reader kits in operation, as well as his new Elecraft KX-3 QRP rig. The presentation was very informative. ∎

WA8SCT Equipment

#	Item description	Value
1	Heathkit SB-201 Linear Amplifier	$225.00
2	Heathkit IT-3120 Transistor Tester	$30.00
3	Heathkit IM-2410 Frequency Counter	$55.00
4	Heathkit VF-7401 2 Meter Transceiver	$40.00
5	AEA PK-232 MBX Packet Controller	$45.00
6	RCA Volt Ohm Meter	$50.00
7	CDE Rotor Controller	$45.00
8	Precision VTVM	$15.00
9	Heathkit B-7 Coil Set	$20.00
10	Heathkit DX-60	$45.00
11	Knight 2 Meter Transceiver	$25.00
12	Knight V-107 VFO - Knight TR-108	$55.00
13	Heathkit HD-15 Phone Patch	$10.00
14	Swan 250 Transceiver	$110.00
15	Heathkit HM-102 SWR Meter	$30.00
16	Heathkit HM-102 SWR Meter	$30.00
17	Heathkit HM-15 SWR Meter	$20.00
18	Heathkit DX-60B + HG-10 VFO + T/R relay	$100.00
19	Heathkit IG-82 Sine-Square Generator	$40.00
20	Heathkit HD-11 Q Multiplier	$20.00
21	Hickok 650 Signal Generator	$20.00
22	Hickok 288X Video Generator	$15.00

#	Item description	???
23	Home Brew - we are not sure what it is	
24	Heathkit HW-30 Twoer	$35.00
25	Genometer TV-50A	$15.00
26	Johnson Viking Match Box	$60.00
27	Heathkit IM-17 Volt Meter	$20.00
28	Heath IP-17 HV Power Supply	$30.00
29	Eico Grid Dip Meter with coils	$30.00

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