

# The ME Vernon Amateur Radio Club



## September, 2009 Newsletter

Meetings are held the 2<sup>nd</sup> Monday of each Month at 7:00 P.M. at the Knox County Chapter of the American Red Cross, 300 N. Mulberry Street, Mt. Vernon, Ohio

### Local Ham Community

K8EEN Repeater: 146.790 Mhz (-600 Khz With PL of 71.9 Hz) KD8EVR Repeater: 442.100 Mhz (+5Mhz With PL of 71.9 Hz)

Sunday Night ARES Net at 9:00 P.M. on The K8EEN Repeater Wednesday Night Social Net at 9:00 P.M. on the KD8EVR Repeater

### Program for the September Club meeting:

### Library Video Series: SET --Amateur Radio Simulated Emergency Test

Everv October amateurs throughout the their nation hone emergency preparedness skills in the Simulated Emergency Test, or SET. See how a routine SET operation unfolded in eastern Massachusetts, and how it became a real emergency when a gas leak was discovered.



Produced by Bob Doherty, K1VV and Don Tanguay, N1DT, members of the Marconi Amateur Radio Club, W1AA.

Running time: 26 minutes

This DVD is part of the American Radio Relay League, Field and Educational Services video library.

The Video will be presented by Tony Spiegel, KC8UR, our Vice President.

President Arlin Bradford, KC8EVR, would like members to bring their "Go Kits" to show off. He would also like to

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MVARC Club Meeting is Monday, September 14, 2009 at 7:00 P.M. in the Red Cross Annex Building, 300 North Mulberry Street, Mt. Vernon, Ohio. The Program will be on Emergency Communications. Tony Spiegel has a Video titled "SET -- Amateur Radio Simulated Emergency Test"; and Arlin Bradford, KD8EVR is asking members to bring their "Go Kits" to the meeting.

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Please remember to check into the long running Sunday Night ARES net at 9:00 P.M. on the K8EEN 2-meter Repeater.

Also check out the UHF net on the KD8EVR Repeater. This net runs each Wednesday at 9:00 P.M. and is a social net. Please join us for the fun of it.

Every Wednesday at 5:00 PM, MVARC club members meet at Wendy's, 522 South Main Street, Mt. Vernon, Ohio. Dinner Coordinator Dick Huggins, N8RDH, reports good turnouts for this event. Come share dinner with friends, or make new friends, by attending one or all of these events.

Join MVARC club members every second Saturday of the month for breakfast. Breakfast Coordinator Arlin Bradford, KD8EVR, reports good turnouts for this event.

\*\*\*The next Breakfast will be September 12, 2009 at 9:00 AM at Allison's Finer Diner, 11587 Upper Gilchrist Road, Mt. Vernon, Ohio\*\*\*

have a discussion on charging batteries and building emergency antennas. This will be after the Video.

Sounds like an interesting evening. Please plan to attend.

### FROM THE PRESIDENT; Arlin Bradford, KD8EVR

Well, some great news arrived in the mailbox this past week. As you may know, several months ago the club members voted in favor of applying for some grants. These grants would go towards building a communications vehicle utilized for disasters, training, and other club events.

I am excited to say we received confirmation from Operation Round-Up, an organization funded by Licking Rural Electric, to start the process of purchasing the equipment. The funds will allow us to acquire much needed radios, antennas, and othe requipment the club may need. The details of the grant will be discussed at the September 14<sup>th</sup> meeting.

Along with the grant, we will be discussing Emergency Communications. Please bring your Go-Kit

See you at the meeting. Arlin, KD8EVR

### Next Ham Classes Set For January, 2010

The next Technician Class Ham Course will start Thursday, January 14, 2010. Classes will be held weekly from 7:00PM to 9:00PM through February 25 with testing commencing Saturday, Feb 27 at 10:00AM. Location of the classes has not been determined.

While it was tempting to fit another class in before years end, it was decided to avoid the Holidays altogether.

Flyers will be created and handed out to members for posting where possible. A class synopsis will be developed. Please let friends and family know of this opportunity to join our interesting hobby. Reports of our hobby's demise are premature. Ham Radio in the United States has actually grown the last several years.

Anyone wishing to help out with classes in any way please contact Don Russell, W8PEN, at <u>w8pen@arrl.net</u> or 740-397-0249. Additional Instructors are always welcome.

### Ohio House Bills Could Effect Amateur Radio

To all Hams in the Ohio Section:

Today, we found that legislation was introduced to the Ohio House of Representatives that may affect our mobile use of Amateur Radio.

House Bill 261 and House Bill 262, introduced by Michael DeBose (D - Cleveland) are titled as follows:

HB 261: "To amend section 4510.01 and to enact section 4511.204 of the Revised Code to **prohibit driving a vehicle while text messaging or typing on a mobile communication device** and to establish the violation as a secondary traffic offense."

HB 262: "To amend section 4510.01 and to enact section 4511.204 of the Revised Code to **prohibit driving a vehicle while talking, text messaging, or typing on a mobile communication device** and to establish the violation as a secondary traffic offense."

In both bills, the definition of a "mobile communication device" is stated as follows:

"As used in this section, "mobile communication device" includes any of the following:

- (1) A wireless telephone;
- (2) A text-messaging device;
- (3) A personal digital assistant;
- (4) A computer;

(5) Any other substantially similar wireless device that is designed or used to communicate voice, text, or data."

While there are exclusions for Emergency Personnel, Vehicles, etc. there are no clear exclusions for Amateur Radio as the introduced bill is written.

Section Government Liaison Nick Pittner, K8NAP, have already started dialog on getting a game plan together on how to approach this.

I am sending this e-mail to let everyone know that the Ohio Section Cabinet is aware of this introduced legislation, and is starting legwork to see what can be done to make sure Amateur Radio is taken into consideration while these Bill start their progress through the Ohio House of Representatives.

As always, my e-mail inbox is open for your comments and suggestions regarding this matter.

73,

Frank Piper, KI8GW ARRL Ohio Section Manager

## MVARC Mt. Vernon Amateur Radio Club

Minutes for the August 11 2009 Meeting.



By Jeff Butz, N8SMT

#### Attendees:

1	Don Blizzard	W8UMH
2	Tom Evans	KD8HSA
3	Bart Hains	KD8LDT
4	Brandon Hunt	KD8LPP
5	Jim Jennessee	KD8UT
6	Ann Bradford	AE8LFH
7	Matt Sturgeon	Guest
8	Arlin Branford	KD8EVR
9	Don Bunner	KB8QPC
10	Don Russell	W8PEN
11	Tony Spiegel	KC8UR
12	Mike Mc Cardel	KC8YLD

President Bradford formally called the business meeting to order at 7:15 P.M.

President Bradford introduced Matt Sturgeon the new Deputy Director of the Knox County Emergency Management Agency who is visiting the club this evening.

#### EC Report, Arlin Bradford, KD8EVR:

No update this month.

#### Technician Class/Exam: Mike McCardel, KC8YLD

They are thinking of starting a class sometime in September. They will have more information at next meeting.

#### 2009 National Night Out: Arlin Bradford, KD8EVR

Arlin said we had a very good showing from the club membership and they met and were seen by the Sheriff's Office, the Mayor, EMA and Red Cross, unfortunately they were located in the a bad location at the fairgrounds so they didn't get a lot of traffic.

#### OLD Business:

#### Emergency Trailer: Arlin Bradford, KD8EVR

Arlin has a meeting with the grant people August 25th so he hopes he will have more information by next meeting.

#### Red Cross Antenna: : Arlin Bradford, KD8EVR

Arlin said that our proposal wasn't submitted in time for the Red Cross's board meeting but it was on the agenda for the next meeting.

#### New MVARC Website: Don Russell, W8PEN

Don relayed some information about the development of the new club website from Ruben Clark Ruben has some functional design ideas and you can view a framework in progress at <u>http://new.mvarc.net/</u> but he is not overly pleased with the development so far. When it is completed, designated members will be able to update portions of the website themselves. This should allow it to stay up to date more readily.

#### **New Business**

No new business.

A motion to adjourn was made and approved by voice vote.

The meeting was adjourned at 8:25 P.M.

## Passing the Tech Test

By Dan Romanchik, KB6NU

I teach One-Day Tech classes. At the start of each class, I go over the following to help focus students on what to keep in mind when taking the test. It occurs to me that these are good tips no matter who is taking the test, so if

you know someone who will be testing soon, please feel free to pass along this advice.



#### **Technical Topics**

The Tech test is not very technical, but there are three technical topics that you need to know:

- \* Ohm's Law,
- \* how to calculate power, and
- \* the relationship between frequency and wavelength.

Ohm's Law

The basic formula for Ohm's Law is voltage (E) equals

current (I) times resistance (R), or E = I x R. On the test, there are several questions where they give you two of the values and ask you to calculate the third. If you're asked to calculate the current, you use the formula, I = E / R. If you need to calculate the resistance, use the formula R = E / I.

#### How to Calculate Power

The formula for calculating power is power (P) = voltage (E) times current (I), or P = E x I. To calculate the current drawn, when given the power being consumed and the voltage applied to the circuit, use the formula I = P / E.

#### **Relationship Between Frequency and Wavelength**

There are several questions that require you to calculate the wavelength of a signal or some fraction of the wavelength. The reason for this is that antennas are often a fraction of a wavelength.

The formula that describes the relationship between frequency and wavelength is wavelength in meters = 300 / frequency in MHz. One question asks for the approximate length of a quarter-wavelength vertical antenna for 146 MHz. To figure that out, you first calculate the wavelength:

wavelength = 300/146 = 2.05 m or about 80 inches

One quarter of 80 inches is 20 inches, and the antenna will actually be a little bit shorter than that because radio travels more slowly in wire than it does in free space. The correct answer to this question is 19 inches.

That's all there is to the technical part of the test!

#### Safety

There are lots of questions on the test about operating safely and being safe when working on antennas. My advice when answering these questions is to always choose the most conservative answer. The two exceptions are when asked what is the lowest voltage and current that can hurt you. For these questions, the correct answer is the second lowest choices.

#### Emergencies

There are lots of questions about what to do in emergencies. There are two things to keep in mind when answering these questions:

- You should do whatever you can to help someone who is in an emergency situation.
- You can even break the rules to help someone in an emergency situation. This includes operating on frequencies you are normally not allowed to operate on and communicating with other stations in other radio services.

#### **Miscellaneous Tips**

Here are a couple of other miscellaneous tips:

- The answer is 'D.' If one of the answers to a question is, "D. All of these answers are correct," chances are that is the correct answer. There are 18 questions with this option, and of those 18 questions, there are only two questions--T3B06 and T5B03--where that is not the correct answer.
- Long-Answer Rule. Where one answer is a lot longer than the other options, chances are that this is the correct answer. I haven't done an exhaustive study of this, but when one answer is very long, take a good, hard look at it.

#### That's all I have. Good luck on the test!

When not helping people pass the Tech test and become good amateur radio operators, Dan likes to work CW on the HF bands and collect QSL cards from stations whose callsigns spell words. To see what else he's up to, go to www.kb6nu.com

### AMATEUR RADIO STATION WX4NHC FEATURED IN NATIONAL COMMERCIAL

From the ARRL Letter, August 14th

WX4NHC, the Amateur Radio Station at the National Hurricane Center (NHC)

<http://www.wx4nhc.org/>, is featured in a 60 second radio spot for Duracell batteries. The commercial, which begins airing this month, highlights the efforts of an all-volunteer army of ham radio operators for WX4NHC. Narrated by actor Jeff Bridges, it describes the important role that radio amateurs during severe weather play conditions enabling



communications with emergency medical teams, police and fire departments -- when the power goes out. The narration underscores the importance of a reliable battery to power the portable ham radios, which are crucial to WX4NHC's work. Listen to the spot here:

<http://www.arrl.org/news/files/HURRICANE 60 PREPA REDNESS MIX.MP3>

"This commercial is being played nationally during hurricane season and will help promote awareness of Amateur Radio and the public service we do to provide emergency communications, especially during and after hurricanes, when we have experienced complete electrical and conventional communications blackouts for periods of days and weeks," WX4NHC Assistant Coordinator Julio Ripoll, WD4R, told the ARRL. Ripoll said that he and WX4NHC Amateur Radio Coordinator John McHugh, K4AG, worked with the ACME Marketing Firm and Duracell for several weeks to help produce the radio commercial. "It captures the essence of Amateur Radio volunteer public service and the important role of Amateur Radio performs during emergency communications in 30 seconds," Ripoll said. "The President and Creative Director of ACME and the Duracell national representative also flew down to Miami and received a tour of NHC and of the WX4NHC station where they learned about our many modes of communications, including our portable VHF/UHF radios and other portable battery operated equipment."

"With this new spot, we are helping to showcase the important contributions made by the Miami ham radio operators," said Duracell's Bob Jacobs. "These heroic teams are working to save the lives of others. When storms strike, the radio operators are donating their time to make sure communications stay intact, facing intense pressures and dangerous conditions to those in need. We're proud that our batteries can help power these life-saving efforts."

## Radio-Activity

By Don Russell, W8PEN

#### **Ohio QSO Party**

August was an interesting month for me, Ham Radio wise. There were three great contests: The North American QSO Party SSB and CW (two separate contests), and the Ohio QSO Party. All three contests proved to be a lot of fun, but the contest that



sticks out in my mind was the Ohio QSO Party. What a blast!

My feelings may not have been such, had I not done so well. When heading down to the shack shortly before the start of the QSO Party, I told Darlene that I would see her when I stopped having fun down there. Twelve hours later, shortly after the end of the contest, I reappeared! Actually, I did come up for dinner and to walk our dogs, but you get the picture.

600 contacts in eleven hours of operating. Hey, that is better than Field Day. This contest, unlike the North American QSO Party, allows one to work CW, SSB, and Digital modes. No digital here, but it was nice being able to switch from SSB to CW when the contacts slowed down. My best hours were 87 contacts on SSB and 74 contacts on CW. Needless to say, I averaged over 50 contacts an hour. 15 and 10 meters were dead from my QTH, so all my contacts came on 80, 40, and 20 meters.

Those that did not participate in this contest missed a really good time. The Ohio QSO party is fun because everyone is looking for Ohio stations, so with a little effort, anyone in Ohio can make a lot of contacts. Just call "CQ" and let the stations come to you.

#### **Rotatable Dipole**

One last report on this antenna.

This antenna has proved to be everything I thought it would be and plenty more! During all three contests mentioned above I had many unsolicited reports of how strong my signal was. They were amazed when I reported I was using a homebrew tri-band dipole.

After three contests I can say the results have been very consistent. I have worked 100 plus stations on 20 meters in each of the contests. My best rate was 80 plus contacts on 20 meters during the North American QSO party, SSB. My usual results on 20 meters during a contest are not that impressive. Usually between 50 and 75 contacts per mode. So, yes, I am very pleased with this antenna.

I think the key to the good results are: This antenna is up higher than the average 20 meter wire dipole. Not many hams can string a dipole between two trees at 50 feet. Being tower mounted on a mast makes it easier to get up high and in the clear. The antenna is rotatable. It is only a dipole, but a dipole up 50 feet has a figure eight pattern broadside to the wire. So it does help to be able to rotate it. Since the antenna does not have directors or reflectors, I can work stations from two directions without having to rotate the antenna. I was working California stations out west and New York stations to the East with equal ease at the same time. That was fun!

My next antenna project is to revamp my 160 meter windom. It is a good antenna and works well for me; however, I am going to reposition it a bit to get a better radiation pattern.

#### QSL Cards

Since we have many new hams in our community, a few definitions may be needed for this next section:

 QSL Card: A card used to verify a contact between two stations. Must include this minimum amount of information: Station Worked, Date, time, frequency, mode, and signal report. Use as proof of a contact when applying for certain operating awards. Traditionally, these are a bit smaller than a post card and are mailed to the other station. If you expect a return QSL, it is a good idea the supply a SelfAddressed-Stamped-Envelope.

- WAS: ARRL Work All States award
- WAZ: ARRL Work All Zone award
- DX Century Club: An ARRL award that indicates an Amateur has worked 100 countries or more. I believe there are endorsements for every 25 or so countries over 100 that are worked. There are over 300 countries illegible to be worked.
- For more information on QSL cards visit this web site: <u>http://en.wikipedia.org/wiki/QSL</u>

One of the long time traditions of Ham Radio is QSL cards. I belong to two QSL services: The ARRL Logbook of the World, and E-QSL. These two services provide a way to electronically upload you log. The services then match you log with other user logs and provide instant verification of contacts. E-QSL also displays QSL cards for you to view. You may print these cards out, or at additional cost, have them mailed to you. The Logbook of the World simply verifies the contacts and allow you to use them as credit towards ARRL awards such as WAS, WAZ, and the DX Century Club awards.

Both are free. Check these sites out at:

#### http://www.arrl.org/lotw/

And:

#### http://www.eqsl.cc/qslcard/index.cfm

Many hams still do it the old fashioned way. In fact, that is still the preferred way for the majority.

I do a lot of contesting, so I get a lot of requests for QSL cards. For a long time, I have printed my own QSL cards up using either "Paint" from Microsoft (included with their operating systems) or more recently "QSL Maker, from WB8RCR a free program from:

#### http://qslmaker.mi-nts.org/

The problem was, I still had to write in the contact information. First look it up in the log to verify the contact. Then fill in the blanks on the QSL Card. What a pain! I am not a neat writer, so many times I would have to tear up a QSL card and start over.

For the above reasons I am traditionally a very poor QSL'r. Yes, I get it done. If someone sends me a card, I will send them one back. Sometime! I rarely send out a QSL card without first being asked for one. I have promised myself to do better many times to no avail. Finally, I think I have found a system that works for me and should improve my response time.

#### Thanks to XMLOG, I have found a better way.

#### http://www.xmlog.com/

I have used this logging program for years. Usually I import my contest logs to this logging program so that I have a one stop place to look up calls for QSL verification. I even went through my old paper logs and entered them in manually! Through the years I accumulated over 40,000 contacts for this logger to keep track of. It does this well, and it is free!

But that is just the tip of the iceberg with this software. It does the usual things you would think a computer logger should do. It tracks awards such as County, State, or DX totals. The software will indicate if you have received a QSL card and whether you have returned the favor. Of course you have to keep it up to date for these kind of things to work correctly. I am interested in non of the above. Maybe someday.

There is one feature that I have begun to use however. That being the QSL creator. Actually, this part of the program deals with making QSL labels that you would print on a label, which is then stuck on your QSL. However, there is a feature that allows you to actually create your own QSL card design. It is not real user friendly, but not really hard to work with once you get used to it. Basically, you tell the program what you want printed on a card and the exact location you want it printed. This takes some experimenting, but there are sample cards of which you can simply modify.

You may import a picture of you, your shack, or anything else you may wish to put on a QSL card. When printing a QSL card, this program will take the contacts from the log that you have selected and print out all the contact information required (call worked, date, time freq, mode signal report). Just select the contacts you need to QSL, then print the cards out. It took me about an hour to modify one of the samples QSL cards to include a picture of me at the key and my QSL information. Now that I am familiar with the program, I could do it in fifteen minutes!

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Don Russell		ookwood Ro non, Ohio 43		Knox C ENB	
Station	Date	UTC	MHz	RST	Mode
KA1LBW/KP4	01-Nov-98	2201	28.101	59+01	RTTY
				Meter Wind	

When I receive a QSL card in the mail, I go to my

computer and start up the logging program, verify the QSO and select that contact to generate a QSL for. I can do this with any number of contacts before printing out cards. If I received five cards in the mail, I can select all five of them for the logger to print out a QSL card for me. Then I make sure my printer has the correct paper in it and hit "print". That is all there is to it.

I like to use 4 X 6 photo paper to make great quality QSL cards. A bit expensive, but they turn out real professional. I have used 4 x 6 plain white index cards. They look pretty decent and do not break the bank.

See you at the meeting. In the mean time, Happy QSL'ing.

### THE DOCTOR IS IN THE ARRL LETTER

#### From the ARRL Letter, September 4, 2009

This week, ARRL Letter readers are in luck! The ARRL's very own Doctor, author of the popular QST column "The Doctor Is IN," answers a question from his mailbag:

Jim Walker, KN6TC, of Wiggins, Mississippi, asks: My repeater's PC controller to radio interface provider requires a "COS (Carrier Operated Signal) from the radio." The manufacturer states that this "greatly reduces drop out and falsing" that are sometimes experienced while using VOX receive/transmit control. It seems to be an alternate for VOX, but I have failed to receive an answer as to what it is in terms I can understand. Neither radio nor interface providers have responded to my email questions.

The Doctor answers: Early repeaters were generally switched to transmit by a carrier operated relay, or COR. The relay would be actuated if the repeater receiver detected a carrier on frequency, as indicated by the opening of the squelch. This was a much more reliable switching mechanism than if the repeater transmit switching responded to detected speech (VOX), since VOX could toggle back and forth due to gaps in speech.

In the early days of repeaters, the equipment was constructed around vacuum tube and relay technology. Current technology is based on solid state devices -including transistor switching -- that is more reliable than the earlier electromechanical relays. Thus, the more general term "COS" for Carrier Operated Signal, Carrier Operated Squelch or Carrier Operated Switch is often used instead of COR. For more information, check out this Web site

<<u>http://www.repeater-builder.com/tech-</u> info/repeaterterm.html>. Do you have a question or a problem? Send your questions via e-mail <<u>doctor@arrl.org</u>> or to "The Doctor," ARRL, 225 Main St, Newington, CT 06111 (no phone calls, please). Look for "The Doctor Is IN" every month in QST, the official journal of the ARRL.

### GET SET FOR THE 2009 SIMULATED EMERGENCY TEST

#### From the ARRL Letter, September 4, 2009

It's time to get ready for the 2009 ARRL Simulated Emergency Test! ARRL Field Organization leaders are planning an event that will actively involve members of the Amateur Radio Emergency Service (ARES), the Radio Amateur Civil Emergency Service (RACES), the



ARRL National Traffic System (NTS) and many other related groups that prepare for and respond to emergencies. Public service agencies and organizations in your community, ARRL Section or state will also be invited to participate. You, too, are invited to be a part of this ARRL sponsored nationwide exercise on October 3-4, 2009, or whenever it is held in your area.

Although October 3-4 is the focal point weekend, ARRL Sections, ARES teams and nets may conduct their exercises anytime -- and especially during September through December. If you don't know who to contact, please touch base with your ARRL Section Manager and/or Section Emergency Coordinator or Section Traffic Manager for assistance. See page 16 of QST for Section Manager contact or the ARRL Web information check site <http://www.arrl.org/sections/>. From there, you'll find links to ARRL section pages with appropriate contact information. There can be a role for you no matter what your level of experience. After all, it is a training opportunity to try out something new under simulated emergency conditions, learn or practice useful skills in traffic handling and net operation, and observe emergency communications protocols and management.

ARRL Field Organization officials in your area and Section are planning the simulated emergency scenarios that will be used during the SET event. These scenarios are designed to help you gain valuable operating experience, or to practice what you have learned previously or to put your Amateur Radio Emergency Communications Course training into action. In any emergency -- real or simulated -- a number of public service or public safety agencies and organizations are often also involved in the response.

ARRL Section Leaders and local or district-level leaders are encouraged to work closely with these served agencies, and the SET is a great chance to demonstrate the capabilities of Amateur Radio in the community and beyond. For more information on whom the ARRL maintains a National Memoranda of Understanding with, check this page <<u>http://www.arrl.org/FandES/field/mou/</u>>. Guidelines and specific SET reporting forms for ARRL Section and Field Leaders will be posted online <http://www.arrl.org/FandES/field/forms>. Please report your SET activities to your Section Leaders and to HQ.

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