



Ham Radio Rock!

The Mt. Vernon Amateur Radio Club

March 2010 Newsletter



Meetings are held the 2nd 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**

Eleven Earn New licenses, Upgrades

By Mike McCardel, KC8YLD

Amateur radio ranks grew by 10 and one other upgraded his ticket at the VEC exam session last Saturday. This exam was a culmination of our recent Technician Class which ended recently.



9 of the 11. The other two were still taking their Extra Class Test at the time of this picture

Erik R Huber, of Powell joined the session to acquire his Tech license. He succeeded by getting a perfect score and to add icing to the cake, scored a perfect score on General exam as well. Tim Toth, KA8RQR, upgraded to his General from Technician.

MVARC Club Meeting is Monday, March 8, 2010 at 7:00 P.M. in the Red Cross Annex Building, 300 North Mulberry Street, Mt. Vernon, Ohio.

A test session for all license classes will be available during the March Meeting starting at 7:00 P.M. Pre-Registration is required. Contact Mike McCardel, KC8YLD: kc8yld@arrl.net , Phone: 740- 481-1972

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 March 13, 2010 at 9:00 AM at Allison's Finer Diner, 11587 Upper Gilchrist Road, Mt. Vernon, Ohio*** Please note that this is the Saturday after the MVARC meeting.***

MVARC president, Alin Bradford's 11 year old daughter Reyann Bradford earned her Technician class ticket. The Bradfords now have a whole house full of Hams.



Proud Father Arlin (KD8EVR) and new Ham Reyann Bradford (soon to have a call)

Father son team David Wilkes and his 13 year old son earned their Technician license. Interesting is that they had the same passing score. We're not sure who was the happiest David or Haddon. Before the exam Haddon was quoted as saying, " I think dad is ready." Kevin Adams scored a perfect 35 out of 35 on his technician exam.



Father/Son David and Haddon Wilkes are new Hams

Others joining the ham ranks earning their technician license were, Jerry Hoeflich, Matt "Bill" Sturgeon, Nicholas J. Atlstatt, and Charles Fisher.

We are very proud about this group. They were attentive and eager to learn and challenged the instructors throughout the class. Their enthusiasm is just what ham radio needs.

Congratulations and welcome to Ham Radio, Old Men and Young Lady!



Volunteer Examiners Dave Phillips (W8DEP), Jim Jennessee (KD8UT) and Steve Barr (KD8GRM)

A special thanks to the VEC team David Phillips W8DEP, Steve Barr KD8GRM, Jim Jennessee KD8UT, Don Russell W8PEN and Team Liaison Mike McCardel, KC8YLD, and to non VE's Jon Penko KD8LFI and Arlin Bradford KD8EVR who assisted with check in.

Monthly Ham Radio Exams Scheduled

Mike McCardel, KC8YLD, has announced that Amateur Radio testing for all license classes have been scheduled during each MVARC meeting through the month of June, 2010.

Pre-Registration is required by contacting Mike at kc8yld@arrl.net or Phone: 740-481-1972.

This would be a good time for all club members and other local hams to hit the books and take that next step by upgrading to General or Extra.

Disaster Prep Tips

From the ARES E-Letter, Feb. 24, 2010

As we start a new decade, let's review some of the basics of Amateur Radio disaster preparedness. The following are tips from John Covington, W4CC, of Dallas, North Carolina.



You must make sure you're personally prepared for a disaster before you can even consider helping with Amateur Radio. If you are preoccupied with personal matters, you won't be able to help ARES?. To be ready for disaster communications, do the following: Train regularly with your local ARES? group.

Think about how you might best be able to help during a disaster. Some of us are good at installing antennas and equipment, others of us are better at operating on the air. Not everyone is suited to doing every job. Sometimes just having helping hands, spare equipment or supplies can be helpful even if you cannot operate the radios yourself. Generators need fuel, operators need coffee, and stations need to be set up. Figure out where you best fit in. Decide how you can help out if you stay home: Can you deploy at a shelter or EOC for a few hours? Operate from home?

If you must evacuate, can you deploy from where you have evacuated to, such as a shelter?

Have all resource materials you need in printed form. Don't depend on computers, PDAs and so forth as they may not work in a disaster, require electricity and are relatively fragile.

If you use a computer regularly in your on-the-air operations, make sure you practice doing things such as calling nets and handling traffic the pencil-and-paper way once in a while. Remember, you may not be able to spare the amp-hours or the table space to run a computer.

Have an Amateur Radio ready-kit to supplement your personal ready kit. Some items to include:

- Portable radio, antenna and power supply or batteries (2 sets)
- Headset or earphones (you may be operating in a noisy area)
- Any cables you could possibly need
- Pencils and Paper
- Clipboard (firm writing surface, you may not have one otherwise)
- Radiogram forms (helpful but not absolutely required)
- Operating aids (pink card, Field Resources Manual, list of ARRL numbered radiograms, and anything appropriate for your local area)
- Small tools (multi-tip screwdriver, multitools, etc.)
- ARES Identification Card, if appropriate
- Important phone numbers and frequencies
- Map of the area
- Flashlight
- Poncho - very small to store, only around \$2 and can be useful when you least expect If carried in lieu of a personal ready kit, a few other items may be helpful:
- For a short deployment, a bottle of water plus some crackers or something to eat requiring no

preparation could make things much more bearable for you

- Medicine
- Toilet paper - small packets from MRE kits are very handy and don't take up much room
- Moist towelettes

Here are a few other suggestions from Rick Palm, K1CE based on his perspective as a Registered Nurse:

- Know CPR.
- Know the location of the Automated External Defibrillator (AED), and how to use it.
- Know the signs/symptoms of a heart attack and stroke.

Also, be prepared physically, mentally and emotionally for the sometimes overwhelming demands of a disaster or emergency environment. Hope for the best, but expect the worst. You are at risk for witnessing horrific scenes. Protect your self and especially young hams; participate in psychological and grief counseling, if necessary. Your mental health is just as important as your physical health.

Sixth Graders Taste the Thrill of Ham Radio

By Arlin Bradford, KD8EVR

On Wednesday February 24, 2010, I visited Mrs. Orsborn's 6th grade science class at the Mt. Vernon Middle School.

I presented them with a broad range of demonstrations of various history and electronic devices. Starting with Morse code back in 1837 up to present day computers and VOIP technology. I made a couple of contacts via the repeaters here in town and ECHOLINK.



President Arlin Bradford, KD8EVR, with class

After the demonstration I answered questions about ham radio and what it takes to be a ham radio operator.

Several students took contact information about the club.

Since the presentation I have received numerous calls from parents and students inquiring about getting into ham radio. I will be presenting a flyer to the classes at the middle school asking them to attend an informational meeting on Monday March 15, 2010 at 7pm. The meeting will be held at the American Red Cross training center in the rear of 300 N. Mulberry Street. This is open to any ham that would like to attend and meet the students. With us just completing our third class in a year, the hobby appears to be growing in our communities.

If you know of anyone else that is interested in ham radio, invite to attend the meeting on March 15.

Calling All Rookies -- and Non-Rookies, Too! Get On the Air for the ARRL Rookie Roundup

From the ARRL Letter, February 18, 2010

The ARRL Rookie Roundup is designed to help newly licensed amateurs build their operating skills on HF. It is a contest specifically for those new to Amateur Radio, similar to the ARRL Novice Roundup that ran from 1952 until 1995. The Rookie Roundup brings the fun and Elmering of the old Novice Roundup into the 21st century. Three Rookie Roundups will be held each calendar year: SSB in April, RTTY in August and CW in December.



The Rookie Roundup will be scored 100 percent in real time through the www.getscores.org scoring system. There are three ways to participate: by using your favorite logging software with the real time scoring support, by downloading a simple logging program from the www.getscores.org Web site or by logging your contacts directly into a www.getscores.org Web page. No separate logs are required -- it all happens online in real time and final scores will be available online within hours of the end of the contest! More information is available on all of these options at www.getscores.org. Of course, you can get on the air and make contacts without logging them, but you won't have as much fun!

Who Can Participate?

Any ham licensed for 3 years or less qualifies as a Rookie. If you were licensed in 2008, 2009 or 2010, you can compete in the 2010 Rookie Roundup. Non-Rookies may only work Rookies, while Rookies may work everybody. A major part of the success of this contest will be non-Rookies getting on the air and working the

Rookies, just as in the Novice Roundup. Just like in the Novice Roundups of years past (when Novices could work anyone and non-Novices could only work Novices), Rookies may work anyone, be they Rookie or non-Rookie; however, non-Rookies are limited to only working Rookies.

Entry Categories

Single Operator Rookie, limited to a maximum of 100 W. Spotting assistance or using call sign and frequency alerting systems is allowed, but self-spotting or asking somebody to spot you is not. All Rookies must identify themselves as a rookie. Example: "Kilo Bravo One Quebec Alfa Whiskey, Rookie." Non-Rookies only need give their call; no designation is needed.

Awards

Certificates will be available for all participants to download. The top five high scores from each US call area, Canadian province and Mexican call area will be recognized on their certificate. No national winners will be recognized.

Go to www.getscores.org for more information on how to participate. Be sure to check out the April 2010 issue of *QST* for complete rules and other information. The Rookie Roundup -- a fun event for *all* amateurs!

Radio Activity

By Don Russell, W8PEN

The next several months I would like to entertain readers with a long sought after goal of mine. Bouncing radio signals off the moon!



This is not an easy endeavor by any means. In fact, it is in the class of "Weak Signal Communications". Indeed, much of the moonbounce work being done today is via computers that can hear signals 6 to 12 db under the noise. The human ear cannot hear these signals, but a computer using soundcard software can pull out these signals and decode them into intelligent text on the computer screen.

While I plan to try the computer software route as a starting point; my main goal will be to communicate using Morse Code with the human (me) doing both the sending and receiving.

This is not a project taken on lightly. I have desired to try Moonbounce (commonly known as EME for **E**arth-**M**oon-**E**arth communications) since the beginning of my ham radio career in the 1960's.

In the 60's, EME required huge antenna arrays and close to the legal limit amplifiers. Today, there are many such stations. Not sure if you would call them "Super EME Stations", but the term certainly fits. Fact is that these super stations, along with big advances in receive technology and the computer soundcard software, allow a modestly equipped ham radio operator the opportunity to successfully work EME.

I already have a few pieces that will help me accomplish EME. My FT-847 will do nicely as the main station. I have heard of several hams using this rig for EME. I also have a receiving preamp that can be mounted at the antenna. Rounding this out is the amplifier. I picked up an amplifier a few years ago that is rated at over 100 watts output on 2 meters. I have yet to check this amplifier out. I bought it with EME in mind knowing that the bare minimum needed for successful EME would be 100 watts or so. If this amplifier does not work, I will have to look at the alternatives.

So, here are some project goals and directives that need to be accomplished to allow me to do EME:

1. First of all, my antenna system needs to be portable and easy to tear down and set up. I say this because I do not wish to have some monster array sitting in my yard and not being used for weeks at a time. A one hour set up and tear down would seem reasonable. That way I can set it up for a weekend or a weeks worth of activity and take it down when I am not expecting to use it for a while. Antennas and masts can be store under cover along my fence line out of sight, much like the clubs Field Day towers and stuff.
2. I will start out with one 10 element, long boom Quagi antenna. The quagi antenna has a bit more gain than a yagi antenna and every bit of extra gain will help. I plan on using Quagi plans from W5UN, which owns one of the super stations I was talking about earlier. The length of this antenna is 20 plus feet, therefore the "long boom" description. See what I mean by not wanting this antenna up permanently? This antenna will be mounted about 10 feet off the ground and perhaps turned by hand to begin with. I will attempt to receive some moonbounce signals with this antenna before moving on with the project.
3. Whether I am able to receive some EME signals or not, a second quagi may be built and the two fed in phase for 16 to 17 db gain. I have read that this is about the minimum gain for EME work with anyone but the big boys, although stations with smaller antennas have been successful. The two antennas will have to be nine to twelve feet apart to achieve the maximum gain possible. These antennas will need to be orientated horizontally because I plan on taking advantage of ground gain that occurs if you try EME at moon set or Moon rise. Apparently there is about a 3 db gain by doing this.

4. Ultimate plan would be to have four 10 element quagi's phased together. With this system I should have enough antenna gain to do successful EME with medium to large EME stations and possibly a few smaller equipped stations. I will also be very close to being able to hear my own echoes bouncing off the moon (about a three second delay). This will come later (perhaps years!), hopefully after some success with EME contacts using two antennas. It would be really exciting to hear ones own echoes!
5. These antennas will need to be homebrew. The price of commercial antennas to do the job would be in the \$500 plus range just for two antennas. A bit out of my budget plans. I figure I can build two quagi's for around \$100.
6. For receive, there will be a low noise preamp mounted at the antenna. The actual station may be outside during EME attempts, or I may go ahead and run antenna lines into the shack. If rotating the antenna by hand, then the station being outside close to the antenna seems to be the way to go. Also, I would need to consider loss in feed line. Much less loss in 15 feet of coax than in 100 feet. Sounds like this may be a Field Day type project.
7. To start, I will try EME with about 100 watts if the amplifier mentioned earlier puts out that much. If it does not put out the required wattage, I may bite the bullet and go for a Mirage 200 - 300 watt amplifier. Perhaps I can pick one up used at a hamfest for a reasonable price.
8. My first QSO attempts will be with computer software. My opinion of using computer soundcard software designed for EME though is that it only provides the minimum information required to make a bonafide contact for QSL purposes. I would like to go a bit further than that and actually have a QSO on EME, which may or may not be possible. I could be expecting too much. There is something called faraday rotation that limits how a QSO on EME is made. I guess the routine procedure is to transmit for two minutes and listen for two minutes with lots of repeated stuff until each station has all the information for a valid contact. Seems though, with the many digital soundcard modes for HF, one would work with EME and has just not been tried. Like I say, I may be underestimating the possibilities here. For now, CW (Morse Code) seems like the best chance to have a real QSO though.

Will the effort be worth it? Don't know. Since I am into contesting and there are EME contests, it may be a lot of fun even if I never have the opportunity for a real QSO. I may get hooked and continue to build a bigger station. This is ham radio! One never knows what excitement is waiting at the next turn.

Okay, I think that covers everything. Stay tuned for next month, when I will go into detail about the antenna array I hope to use for this project.

ARRL Board Decides EmComm Issues

From the ARES E-Letter, Feb. 24, 2010

The Board of Directors of the ARRL concentrated much of its deliberations on major emergency communications issues when it met in Hartford, Connecticut last month.

The Board approved the signing of a Memorandum of Understanding (MoU) with the American Red Cross (ARC). The ARC has agreed to permit ARES? volunteers to meet its requirement for a criminal background check by obtaining such a check, at their own expense, through a law enforcement entity rather than through the ARC process. ARRL members will be given information to permit them to make a fully informed decision with regard to volunteering with ARC.

The Board also instructed the ARRL staff to seek a change in Section 97.113(a)(3) of the FCC rules to permit amateurs, on behalf of an employer, to participate in emergency preparedness and disaster drills that include Amateur operations. There is an extensive discussion of this action on page nine of the March issue of *QST*.



New MOU with Red Cross Offers Much

From Weaver's Words, Feb. 23, 2010

The new MOU between Red Cross and ARRL does much more than include an agreement to support RC and to acknowledge the appropriateness of criminal background checks for its ham supporters. When it is signed by both organizations it will provide a clear distinction between amateurs as official Red Cross volunteers and amateurs as partners but not RC volunteers. This should be a very helpful distinction. Basically it means that amateurs can provide volunteer communications support to the community through RC without becoming RC volunteers if this is what they choose.

Why is this potentially an important distinction?

It has been my personal experience that RC chapter officials typically conclude anyone who provides support

to them is a RC volunteer. This conclusion may be justifiable for "the man on the street" who walks in to a chapter house and says he wants to help. On the other hand, the conclusion may or may not be accurate regarding individual members of an ARES(TM) unit that also offers to help. The ARES member may, in fact, be volunteering to support ARES in its assistance to RC, but not be interested in being a RC volunteer.

One important feature of the new MOU is that it clearly distinguishes between ARES members and RC volunteers. ARRL and ARES are referred to as partners and in similar terms, not as RC volunteers. The MOU solidifies this distinction even further when it agrees that ARES amateurs should be encouraged to become RC volunteers and that RC amateurs who do not belong to ARRL/ARES should be encouraged to join these organizations.

Again, why is this distinction important?

As a RC volunteer, an individual may be required to sign certain agreements that are not required if the individual is not a RC volunteer. One agreement is the Intellectual Property Agreement that basically gives the RC first rights to ideas, inventions, developments, and other property developed by the individual even though these were not developed for Red Cross or as a direct result of being a RC volunteer. Those of you who work for major corporations may have signed a similar agreement with your employer to get a job and earn a living.

I am aware of at least one local Chapter for which the Intellectual Property Agreement is a big issue. Many ARES members in its service area are very reluctant to sign the agreement, but are equally interested in providing valuable service to the community through the RC. They view the situation as being one of lose-lose.

Because the new MOU recognizes that ARES members do not need to become Red Cross volunteers, it should not be necessary for amateurs who choose not to be RC volunteers to sign the agreement. This same philosophy will apply to other requirements of RC volunteers.

Unfortunately, it may be necessary to wait until the new MOU is published to convince many RC chapter managers that radio operators are not required to become RC volunteers and, therefore, are not required to sign these agreements.

One final thought. Becoming an official RC volunteer may not be one-sided. This may depend on the specific chapter, but some chapters reimburse their volunteers (including amateurs) for certain expenses while performing RC duties. It would be justifiable for these reimbursements not to be offered to hams who choose not to be RC volunteers.

Jim Weaver, K8JE, Director
ARRL Great Lakes Division

MVARC

Mt. Vernon Amateur Radio Club



By Jeff Butz, N8SMT

Minutes for the February 8, 2010 Meeting.

Attendees:

1.	Don Bunner	KB8QPO
2.	Don Russell	W8PEN
3.	Brandon Hunt	KD8LPP
4.	Nathan Campbell	KD8LOY
5.	Steve Barr	KD8GRM
6.	Tom Evans	KD8HSA
7.	Mike McCardel	KC8YLD
8.	Arlin Bradford	KD8EVR
9.	Kreig Williams	KD8MWK
10.	Jim Jennessee	KD8UT
11.	Jeff Butz	N8SMT
12.	Tony Spiegel	KC8UR
13.	Austin Godber	KD7NMS
14.	Bart Hains	KD8LDT

President Bradford formally called the business meeting to order at 7:10 P.M.

The Minutes of last month's meeting were read by the club secretary, Jeff Butz, N8SMT and were corrected to read that Tom Evans, KD8HSA bought the emergency vests for the emergency vehicle.

A motion to accept the minutes as corrected was made by Mike McCardel, KC8YLD and seconded by Don Russell, W8PEN. The motion passed by voice vote.

Treasurers Report: Don Russell, W8PEN

As of January 1, 2010

Balance:	\$2857.45
Interest Income	\$1.06
Dues	\$102
Donations	\$9
50/50 Drawing	\$8
Expenses	
Red Cross Training	\$96

Total Balance - Jan. 30, 2010	\$2881.57
2005 Repeater Fund	\$348.94
Field Day Fund	\$64.92
Communications Vehicle Fund	\$540.18

EC Report: Arlin Bradford, KD8EVR

The Skywarn training day has not be scheduled yet. Hopefully it will be by next month.

Vice Pres Report: Tony Spiegel, KC8UR

Tony's friend that donated the used Motorola Repeater to the club also donated 500 feet of RG8X coax cable. He would like that mentioned in the letter of appreciation to his friend.

Grant Committee Report: Arlin Bradford, KD8EVR

Arlin is still waiting on the City to provide the necessary paperwork for the vehicle.

Earth Day Marathon: Mike McCardel, KC8YLD

Mike said the organizers would like to have a Ham at each station this year. This will mean a larger commitment by the club. He is also thinking of employing some mobile units with APRS during the event.

Technician Class/Exam: Mike McCardel, KC8YLD

Mike and Don are very pleased with the class so far. The students seem very enthusiastic and interested. and they expect good results on the exam. They are planning on putting on the next class next January but in the mean time they are exploring ways of tutoring anyone who would be interested in getting their General Class license.

Old Business:

Donated Motorola Repeater: Arlin Bradford, KD8EVR

Arlin advised that the radio is not a repeater it is a VHF Transmitter/Receiver. It could be made into a repeater if we added a controller, a duplexer and bought new crystals but Arlin felt that it was not cost effective. Jim Jennessee, KD8UT made a motion to sell the radio at the Mansfield Hamfest for any price over \$40.00 with the proceeds going into the general fund. The motion was seconded by Tony Spiegel, KC8UR and passed by voice vote.

New Business:

Austin Godber made a motion to form an Events Committee. The motion was seconded by Don Bunner and approved by voice vote. Austin volunteered to chair the Events Committee.

A motion to adjourn was made and passed by voice vote. The meeting was adjourned at 8:40 P.M..

Mt. Vernon ARC Officers

President: Arlin Bradford, KD8EVR
Vice President: Tony Spiegel, KC8UR
Secretary: Jeff Butz, N8SMT
Treasurer: Barry Butz, N8PPF

kd8evr@mvarc.net
tony516@embarqmail.com
Jaylynn@copper.net
n8ppf@mvarc.net

Phone: 740-627-0922
Phone: 740-392-7586
Phone: 740-965-9368
Phone: 740-397-7540

Newsletter Credits

Editor: Don Russell, W8PEN

The ARRL letter is a weekly e-mail publication by the ARRL. You may read the entire ARRL letter by visiting the ARRL Web page at <http://www.arrl.org/>. Other News from: <http://ky4ky.com/fyi.htm>.

The ARES E-Letter is an e-mail digest of news and information of interest to active members of the ARRL Amateur Radio Emergency Service (ARES). Past issues of The ARES E-Letter are available at <http://www.arrl.org/ares-el/>. Issues are posted to this page after publication.

Members are encouraged to send articles pertaining to ham radio, with an emphasis on local activities, equipment reviews, and personal experience to w8pen@arrl.net or Don Russell, W8PEN, 815 Brookwood Road, Mt. Vernon, Ohio 43050

Membership Form

Club dues run from Jan. 1 until Dec. 31 and are collected during the last quarter of the year. You can mail in the dues to the address below or bring them to a meeting. Dues are prorated for new members at the time of application. Visit our Web Page at www.mvarc.net

Dues Schedule: \$12 regular

\$10 for second member in the same family, for those over 65 yrs. of age, and for those living outside Knox County

Mt. Vernon Amateur Radio Club, P.O. Box 372, Mt. Vernon, OH 43050

Name _____ Call-Sign _____

Street _____

City _____ State _____ Zip Code _____

Phone Number _____ License Class _____

ARRL Member (Y/N) _____ E-Mail _____

Extra Donation (Optional) _____

Members are entitled to a free MVARC E-Mail address. Would you like one? No _____ Yes _____

If yes please enter password _____

Other Comments: