Ham Radio Rocks!

The Mt. Vernon Amateur Radio Club

April, 2009 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

From the Pen of W8PEN

Before we get started, there are a few announcements that need to be made, so that club members may mark their calendars:

- We have confirmation that our Skywarn training will be April 29th, 6:30 PM at the Knox County EOC (Inside the Sheriff's office). Let me know if you have any questions.

  Ruben Clark - KB2SAI
  Emergency Coordinator, Knox County ARES
  Email: kb2sai@mvarc.net
  Phone: (740) 501-8106

- The Kenyon Colleges "Earth Day Challenge" marathon run will be Sunday, April 19, 2009. Once again, the club has been asked to provide communications for the event. Interested members should contact Mike McCardel, KC8YLD, to sign up for this event. Mikes email address is kc8yld@arrl.net. The Mansfield ARES has volunteered some extra bodies plus the use of their communications van. Should be an interesting day and I encourage all members to help out.

- The Mt. Vernon Amateur Radio Club and the Salvation Army are sponsoring a Ham Radio Class. Classes began March 26th. There is still time for interested parties to attend. We can have a "catch up" class or two if needed. Presently there are about 11 students. Classes are being held at the Salvation Army, 206 East Ohio Avenue, Mt. Vernon, Ohio.

MVARC Club Meeting is Monday, April 13, 2009 at 7:00 P.M. in the Red Cross Annex Building, 300 North Mulberry Street, Mt. Vernon, Ohio. Tom Evans, KD8HSA, is set to talk about Aviation Communications. Also, Richard Hensel, N8WLC, will describe his radio setup and adventures while being "Airborn Mobile". Programs will begin promptly at 7:00 PM with the meeting following the presentations.

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 fair turnouts for this event.

******The next Breakfast will be April 11, 2009 at 9:00 AM at the R&M South Side Dinner, 620 South Main Street, Mt. Vernon, Ohio******

Classes are held each Thursday from 7:00 to 9:00 PM with the last class scheduled for April 30th. Testing for all classes of Ham licenses will held Thursday, May 7th starting at 7:00 PM.

- The clubs monthly Saturday breakfast site has been changed. Ryan's Restaurant is no longer serving breakfasts on Saturday. For now, the new location will be R&M South Side Dinner, 620 South Main Street, Mt. Vernon, Ohio. Please check into our Sunday Night net for updated information.

- The April meeting should be a fun event. Tom Evans, KD8HSA, will give a presentation on aviation communications, I believe covering a wide range of frequencies, modes, and technical aspects. Richard Hensel, N8WLC, will also be there to describe is escapades while work "Air Mobile" from his plane. Oh, and there will be a short meeting afterwards! Sounds like an event not to miss.

- Looking a month ahead, Club President Arlin Bradford, KD8EVR, would like the program to be building the "Tape Measure Fox Hunt Antenna". We did this once before and it turned out really well. There are enough new members attending the meetings that this should be done again. While the antenna is mainly used as a light weight antenna for fox hunting, it can be used as a regular beam antenna without any problems. In fact, your editor uses it with his satellite station. A fox hunt may be held the following Saturday after the meeting, giving members a chance to check out their new antenna.

- The KD8EVR repeater has been linked with several other repeaters. This is neat. We now have coverage from Mt. Vernon all the way up to Lake Erie. Arlin is currently working on linking repeaters South of us. Stay tuned…..

ARRL YOUTH EDITOR: YOUNG PEOPLE CAN HELP WITH EMERGENCY COMMUNICATIONS, TOO!

From the ARRL Letter, March 20, 2009

ARRL Youth Editor Duncan MacLachlan, KU0DM, of Prairie Village, Kansas, says many young hams want to help out with Emergency Communications and ARES activities, but really don't know where to start.

"One disadvantage of being younger hams is the fact that legal guardians are a must for most situations," MacLachlan said. "While a young ham may not be able to go out and save the day with a handheld transceiver after a large storm, there are many ways they can aid in emergency operations." MacLachlan said that the first step in helping to support Emergency Communications is to join the Amateur Radio Emergency Service (ARES) or a local club that works with city or county to provide emergency communications services.

"When you approach your EC -- the Emergency Coordinator, basically the president of that ARES group -- I recommend that you have discussed with your parents what you can and can't do in an emergency in terms of Amateur Radio response. If your parents are like mine, chances are they're not fond of the idea of having their kid running around a disaster zone in the name of emergency communications. I'd recommend asking your EC if there is a position you could fulfill from home, or even in the EOC (Emergency Operations Center) where operations are carried out." One example of a duty that a young ham could fulfill at the EOC would be Net duty.

In an emergency response effort, MacLachlan said that hams establish a Net to relay emergency traffic or other information to the people responsible for responding to the event: "Chances are the Net will last longer than 10 hours, and since hams are human, the primary Net Control (NC) will need a break at least several times in that time period -- you could help as back-up.

Another duty that could be performed is shadowing various emergency response personnel for the city. Believe it or not, not a lot of Emergency Managers have their Amateur Radio license. If they go out to drive around and survey damage, they need to have a link to the ham radio Net in case they hear anything they need to respond to." MacLachlan recommends that young hams contact their EC and ask what roles there are that they could perform for the group in an emergency. "If you know your parents' threshold of what you can and can't do, let the EC know upfront that you do have limits," he cautions. "Make sure you participate in as many emergency communication drills as you can and consult with your EC and other members."

According to ARRL Emergency Preparedness and Response Manager Dennis Dura, K2DCD, young hams also need to check with their local government officials, as well. "Due to legal considerations, not all emergency management officials can have young people in their domains, such as an EOC," Dura explained. "While you can still help out with your ARES group, you might not be allowed to help out in the EOC." MacLachlan strongly encourages local Emergency Coordinators to think of ways of creating positions that younger hams could fulfill in an emergency. "We're the next generation," MacLachlan said, "and starting emergency response at a young age is the best training for when we're ready to take the helm."

Antenna Raising, Anyone?

Saturday, March 21st marked the first antenna raising of the year.

Dick Huggins, N8RDH, lost his antennas during one of the early wind storms of the year. The storm actually buckled the chimney that the antenna mast was mounted on. Since the chimney was no longer in use anyway, Dick decided to have the chimney removed and the antennas moved to a 20 foot tower. Mike Dean, W8OIO, and Dick put the tower up a week earlier, but more work needed to be done. New coax runs had to be made and the antennas themselves had to be moved to the tower. Don Russell, W8PEN, joined the small antenna raising party. Dick, Mike, and Don worked a long, but very nice Saturday (weather wise) installing the antennas. Dick was back on the air on 10 meter SSB and 2 meter FM.

Dick wanted a 440 antenna up so that he could get into Arlin's (KD8EVR) Repeater. Mike made this happen the next weekend. Things are looking good at N8RDH's.

Readying the tower (Mike is on the left)

Mike, W8OIO and Don, WA8YRS ready to lower the antenna mast

Up she goes!

Mission Accomplished

Finished product. 10 meter Vertical on top, followed by the 2 meter dipole and lastly, the 440 Mhz dipole

HAMS ASSIST WOMAN INJURED IN DESERT

From the ARRL Letter, March, 20, 2009

It was a sunny day, not a cloud in the sky, when Hal Whiting, KI2U, Todd Kluxdal, Kluxdal's father and Whiting's two sons decided to go out to the Poverty Mountain area in Arizona to search for airplane crash sites. Whiting, who lives in St George, Utah, and Kluxdal, who lives in Mesquite, Nevada, took two vehicles that day. According to Whiting, they always take two vehicles, just in case a problem pops up: "We always have two spare tires, extra gasoline and a tow rope. We take enough food and supplies to stay two or three days." In addition to the extra equipment, Whiting took the one thing he never goes without -- his ham radio.

"It was a bit after lunch, about 73 miles into our trip," Whiting told the ARRL," when we were flagged down by a man wanting to know if we had a satellite phone, since he couldn't get coverage on his cell phone." Whiting didn't have a satellite phone, but he asked the man if this was an emergency. Whiting said that the man told him that one of his friends had been injured when her ATV rolled on top of her. "I told him I could call for help on my ham radio," he said. The injured woman was knocked unconscious by the fall, but had regained consciousness and was speaking coherently, but was in pain. "I picked up my mic and put out a call on the 146.910 repeater, one of four repeaters run by Dean Cox, NR7K," Whiting said. "I called for assistance a couple of times when Mac Magee, N6LRG, in the Arizona Cane Beds, answered." "Mac lives about 50 miles away from the accident site," Whiting said. "It's funny -- it's usually Washington County hams who are on the repeaters, since that's the direction they're pointed in. But Mac lives in Mohave County. And the accident happened in Mohave County. We were lucky, since if the call was answered by a ham in Washington County, there would have been a delay in them getting the info to the proper authorities in Mohave County, but with Mac answering, all our information went right to the proper place."

That morning, Magee told the ARRL that he came into my shack "and for some reason, turned on the 2 meter rig and it happened to be on the 146.910 repeater. I usually have a problem with the repeater 'hearing' me, so I rarely use it. About 11:20 Arizona time, I heard someone call and say they had emergency traffic and needed help. I fully expected a bevy of hams to answer the call, since so many are in range of that machine, but after his second call, and no answer, I took it." Magee said that the calling station had been flagged down by another motorist. "He told me there had been an accident in the vicinity of Poverty Mountain," he said. "I really had no idea where that was, but I began to write down details. As soon as I had basic info, I called 911. The Mohave County Sheriff Office answered; I explained who I was and what the call was about." The dispatcher asked Magee for the coordinates to the site, and Magee relayed the request to Whiting. "I looked at my GPS and gave Mac my coordinates, but he said the dispatcher wanted the coordinates from the accident site," Whiting said. "So I got in my 4-wheel drive and drove down the ridge to the site, about 5600 feet above sea level, and got the coordinates. I had to drive back to the ridge, another 1000 feet up, to call Mac back, because I couldn't get a signal down there." Whiting told the ARRL that in addition to his ham radio, he also carries a set of FRS radios. "I gave one of the FRS radios to Todd and he drove his Jeep down the ridge to the accident site," he said. "I kept the other one and Todd was able to relay me information about the injured woman's condition and I was able to relay that information to Mac who in turn relayed it to the 911 dispatcher. Mac put the mic right up to the phone so the dispatcher could hear exactly what was going on." Magee said the 911 dispatcher requested more information: "While Hal was replying, I held the phone up to my radio speaker. When he finished with the details, I asked them if they copied that. The dispatcher said he did, and they held me on the line.

Hal and I talked a while as he gave more data. When the dispatcher returned, they said a chopper was being dispatched from Phoenix! Well, we finished that call after they had the actual accident site GPS coordinates that Hal had passed on." With emergency help on the way, Kluxdal returned to the ridge and he and Whiting and his group went on their way to go check out an airplane crash site, the original intent of their trip. "The family members told us to go on and get on with our trip, so we

did, after making sure they were all okay," Whiting said. "So we left to go to the crash site, about 3-4 miles away. As we were getting ready to return, we saw the helicopter overhead, taking the injured woman to the hospital in Las Vegas. We returned to the top of the ridge and a sheriff's deputy was there and he told us that our GPS coordinates were off, but only by 20 feet! He said that the helicopter crew was real happy that they were so on-target."

Whiting said they were glad to have been able to help. "This is a remote area," he said. "There's only one way in, one way out with no shortcuts to get in and out. There are only dirt roads, and it can get very muddy when it rains a lot. I was out that way two weeks ago and got stuck in the mud there, but it was all dry this past weekend." Whiting said he learned a few things after this trip: "I am glad I had my radio equipment with me, and I am glad there was someone listening on the repeater to take the emergency call. Having the spare FRS radios created an efficient means for relay with a non-ham person, and having the GPS equipment provided a very effective means for the helicopter rescue team to locate the accident, since they did not want the road designation information but the exact patient coordinates. It would have been useless to have my equipment if there had not been someone listening. This proves that there is a good reason to keep your radios with you and in good operating condition."

Whiting, who was first licensed in 1976, is the ARES Assistant Emergency Coordinator for Washington County. A CAD Manager and Aerial Photographer for Bulloch Brothers in Mesquite, Nevada (he and Kluxdal are co-workers), he is currently teaching an Amateur Radio licensing class to 13 prospective hams at the Dixie Regional Medical Center in St George. Magee said that before this incident he had never been involved in an actual emergency. "I have established emergency communications networks, in particular for the LDS Church in Newbury Park, California, where I was the Stake Emergency Communications Coordinator." He told the ARRL: "Our communications group won the first worldwide test of the system back in the late 1980s. This is like ARRL Field Day, but involved mostly LDS members and facilities, then under the name of Mercury Amateur Radio Association (MARA) <http://www.mara.net/>.

I feel very pleased in knowing that I had the opportunity to serve in this rescue incident and that every penny I spent on my system, radio and antenna was certainly worth it. In these days of extensive cell phone service and coverage, isn't it satisfying to know that ham radio can still be of use for public service?"

Radio-Activity

By Don Russell, W8PEN

If readers will remember last month, I was debating on what style of antenna would be a good replacement for my tri-band beam. After some research, there are two strong contenders still in the running. One is the 20 - 10 meter mini loop antenna. The other is a tri-band rotatable dipole antenna. The HF J-Pole antenna, which was researched last month, has been put on hold for a while. It will be revisited later this year. For now, I have a few design ideas for the rotatable dipole I would like to put forth.

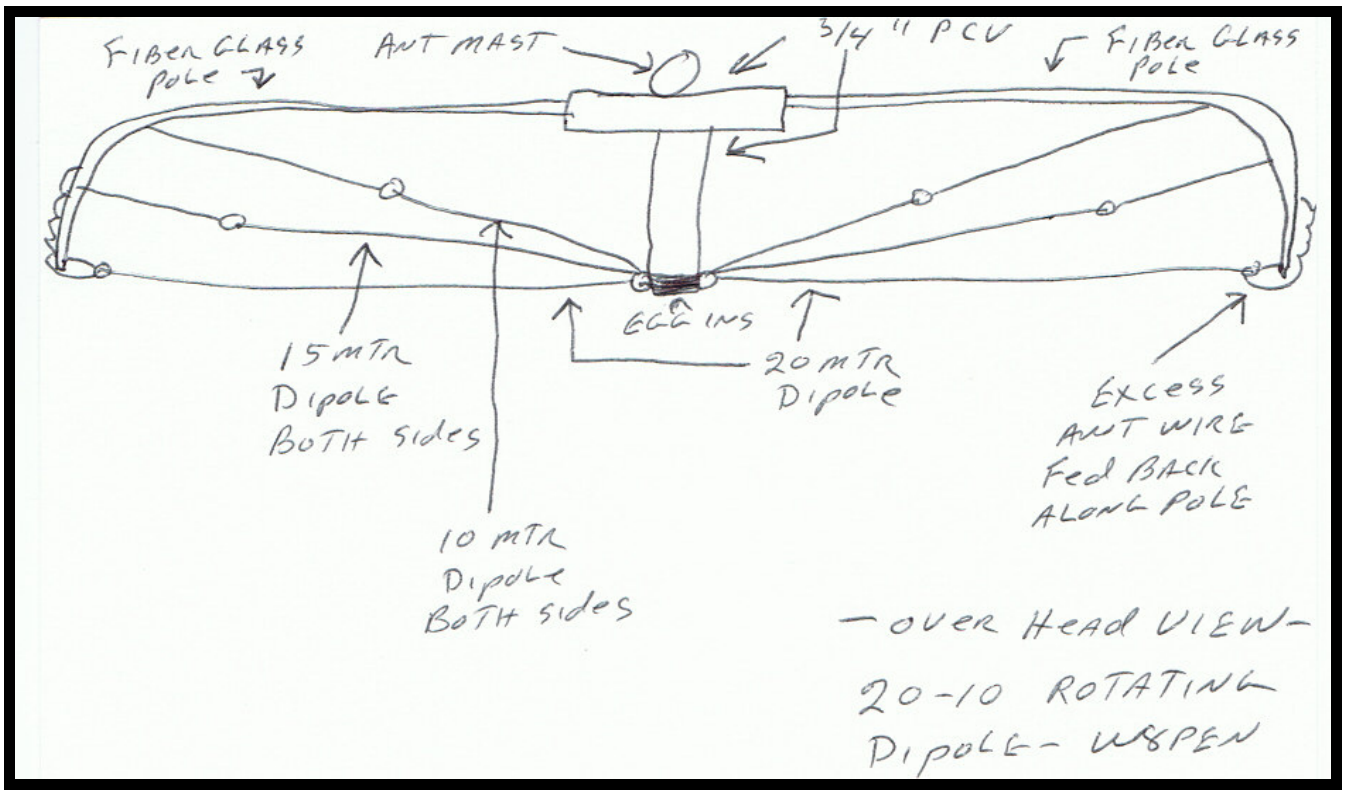
Personally, I believe the loop would be my best choice, performance wise. The rotatable dipole runs a close second though. A dipole up 50 feet should certainly put out a good signal. I know in many contests, I am constantly working stations off the back of the beam, or even the side of the beam. Considering that most beams have a front to back ratio of somewhere between 15 to 1 and 20 to 1 and you can already see an advantage of using a dipole at the same height as that of a beam. One does not have to rotate a dipole 180 degrees to work stations in the opposite direction. Lets face it. Most beams are on towers of 30 feet or better. The typical ham probably tries to get beams up at least 40 to 50 feet. My tower is a self supporting 48 footer. Dipoles are not usually mounted on towers; they are usually strung between two trees, perhaps somewhere close to 25 feet. Is it truly right to compare a low hanging dipole to a high flying beam? Of course not. Certainly a beam will outperform a dipole. However, if a dipole was place at a height equal to a beam, I will bet it would be a very good performer. This theory I want to test.

Another thing to be considered is that most small beams are not as efficient as full sized beams. I place my tri-band beam in this small beam category. Therefore, I would loose even less performance going to a full sized dipole than I would if my beam was a full sized antenna.

Okay, it has been decided. I wish to put a full sized rotatable tri-band dipole on my tower at the 50 foot level. This should be interesting.

The span of a 20 meter dipole would be about 32 feet. This is a good chunk of aluminum up there. Probably very heavy too. All that aluminum would be pretty expensive too. That is not going to happen.

A few days thinking of this antenna (okay, more like two weeks) has allowed me to dream up a feasible design of this antenna:



- The antenna will be made out of two 13 foot "pan fishing poles" that I bought at Walmart for about $8.00 each.
- The center of the antenna will be 3 feet of ¾ inch PCV pipe. This will add about 1 foot on each side. Total length of the antenna will be about 28 feet.
- The fiber glass fishing poles will not be straight. Rather, I will bend the ends a little and run my dipole wires from end to end instead of against the poles. There will be a ¾ inch piece of PCV pipe extending out from the center. This is were the center insulator will be mounted. See my very crude drawing.
- The antenna elements will be made out of wire. Insulators will have to be light weight.
- Since the poles will be shaped into a "U", it will not be long enough to so support a full sized 20 meter dipole. I plan to run the ends of the 20 meter dipole back onto the poles. This is called linear loading, and is the most efficient form of shortening a dipole antenna. Even then, the 20 meter dipole should be 25 feet long or longer. I do not expect much loss in performance, if any over a full sized dipole.
- The 15 meter and 10 meter bands will be covered by individual dipoles cut for their specific bands. These two bands will be full sized dipoles. Perhaps I will add dipoles for the WARC bands too.

- All three dipoles will use the same center insulator and the same coax feed. This antenna will be what is popularly called a "fan dipole".
- Each dipole can be trimmed to its individual frequency. Spacing between antennas should allow this to be done easily.

There you have it. This antenna should weigh in at under five pounds. Since I will be using fiberglass poles instead of common bamboo poles, I do not believe I will have to weather proof the poles, but I may anyway.

The fiberglass design of this antenna will allow me to test this antennas performance for several years or more, if I want to.

By the way, there are longer poles available. I have seen them up to 16 feet long for under $10.00. I went with the 13 foot poles because they were available locally. These poles are actually meant to be used for pan fishing (bluegills and crappie). The 16 foot poles are available at Cabela's Sports Stores under their own brand name.

This is the antenna I am going to try out first. I think it will be a fine antenna and may end up being the only antenna I put up this year. There is the loop antenna to consider, however. Perhaps I will try the loop this year for Field Day. It would be light enough to place on one of the clubs antenna masts with a rotator.

MVARC

Mt. Vernon Amateur Radio Club
Minutes for the March 9, 2009 Meeting.

By Jeff Butz, N8SMT

Attendees:

1	**Larry Helzer, DVM**	**AA8WP**
2	**Jeff Butz**	**N8SMT**
3	**Arlin Bradford**	**KD8EVR**
4	**Steve Barr**	**KD8GRM**
5	**Tom Evans**	**KD8HSA**
6	**Mike McCardel**	**KC8YLD**
7	**Don Russell**	**W8PEN**
8	**Dick Huggins**	**N8RDH**
9	**John Dial**	**KB8TEV**
10	**Ruben Clark**	**KB2SAI**
11	**Nathan Campbell**	

President Bradford formally called the business meeting to order at 7:00 P.M.

Treasurer's Report: , Don Russell, W8PEN
No new treasure's report since Barry, N8PPF is on vacation

EC Report: Ruben Clark, KB2SAI
Ruben asked that everyone send him the net reports.

Skywarn training is tentatively scheduled for April 29th at the EMA office, but the National Weather Service hasn't confirmed it.

There is a tornado drill scheduled for March 25th at 9:00 A.M and that it lasts about 10 minutes.

There will be an Ohio Section ARES meeting March 28th at the Fire Academy.

Net Control People are:

Arlin Bradford
Mike McCardel
Don Russell
Steve Barr
Ruben Clark

Old Business:

Technician Class and Exam
Arlin Bradford said the Salvation Army would like to host the class site. They would like Thursday nights.

Don Russell said the classes would consist of 6 two hour classes from 7:00 to 9:00 P.M. They could start on March 26th which is a Thursday. Then have the exam on May 7th.

Nathan Campbell asked if there would be anyone interested in giving an Assembly at his school. It would be on a Wednesday at noon. If so, please contact Joe Lee at the school.

New Business:

Year End Report: Mike McCardel, KC8YLD
Mike stated the Year End Report has been completed.

Earth Day Challenge: Mike McCardel, KC8YLD
Mike reported that April 19th has been scheduled for The Earth Day Challenge at Kenyon College and we have been asked again to provide assistance.

Field Day
There are 3 months to Field Day, June 26th-28th. Field Day Committee is Arlin Bradford, Larry (Doc) Helzer, and Ruben Clark.

Suggestions for a field day site: Apple Valley, Doc's House, Steve Dick's House, Dick Huggins House.

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

The meeting was adjourned.

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Mt. Vernon ARC Officers

President:	**Arlin Bradford, KD8EVR**	**kd8evr@mvarc.net**	**Phone: 740-427-2440**
Vice President:	**Tony Spiegel, KC8UR**	**tony516@embarqmail.com**	**Phone: 740-392-7586**
Secretary:	**Jeff Butz, N8SMT**	**Jaylynn@copper.net**	**Phone: 740-965-9368**
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Newsletter Credits
Editor: Don Russell, W8PEN

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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.

Project OSCAR is a monthly column written for Newsletter Editors. Columns will appear as space permits. You may download all the columns yourself at: http://www.projectoscar.net/beacon.php

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_____

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