The Mount Vernon Amateur Radio Club
September, 2013 Newsletter

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

Local Ham Coumminity

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

Ham Radio Rocks

Cookout Scheduled For September Meeting

The September MVARC meeting will feature a cookout to finish off the Field Day leftovers. This is pretty much an annual event as we always make sure there is plenty of food for Field Day!

This year the Cookout and Club Meeting will be held our normal meeting night of September 9th at the Hiawatha Park, 112 Sychar Road, Mt. Vernon, Ohio. To accommodate the cookout, meeting time has been moved up to 6:00PM

Per Emery Bennett, W8TW:

Hiawatha Park
112 Sychar Rd off Coshocton Ave
beside the water park. Small parking lot
to the South and a larger lot to the North.
No parking in the pool lot.

We have the park reserved from 4:30PM – 9:30PM. Dinner will start at 6:00PM.

Please see map later in this newsletter on Page 6.

Members are asked to bring a covered dish and their own drinks.

There will also be a tailgate flea market for those wishing to try selling a few items, weather permitting.

The next meeting of the Mt. Vernon Amateur Radio Club will be Monday, September 9, 2013 at 6:00 P.M. We will be finishing off Field Day food with a cookout at Hiawatha Park, 112 Sychar Rd, Mt. Vernon, Ohio.

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 14th at 9:00 AM at Allison's Finer Diner, 11587 Upper Gilchrist Road, Mt. Vernon, Ohio*****

Radio's for Sale

During the August meeting, the club voted to sell two of its HF radios. Both radios are older models and may be considered collector items.

The first one is a Kenwood TS-830 80 – 10 meter transciever rated at 100 watts output. This radio is working and being used by Tony Spiegel, KC8UR. Tony reports that he has been using it on CW. I checked this radio out on SSB a few years ago and got good audio reports. It has the digital frequency display option. Buyer should be aware that this is a hybrid radio. It is all solid state except for a driver tube and the two final tubes. It is a nice older radio that the club has used for many years. Asking price starts at $350. Anyone interested in this radio should contact Don Russell, W8PEN, 740-397-0249 or w8pen@arrl.net.

The second radio is a Heathkit SB-101 80 – 10 meter tubed transciever with external power supply and speaker. This radio is not working, however, it is cosmetically in great shape and heathkits are usually easy to trouble shoot. This is a 1960's era transciever and had been used for several club Field Days in the past. Price has not been set on this. Any reasonable offer will not be refused. This radio will not be available until late October due to vacation issues with the person who has this radio stored for us. Again, please contact Don Russell, W8PEN if interested in this radio (before I decide to buy it myself!)

There is also a radio that I have been trying to sell for some time now. It is a working Kenwood TS-520 80 -10 meter transceiver. All solid state except for the three tubes in the final. I have used this radio a few times to make sure it works and have gotten good reports while using it. It has an analog frequency display (not digital) but frequency is very easy to read. This radio is selling for $250. Once again, please contact me.

I am planning on taking the two Kenwoods to the Findlay Hamfest September 8th so anyone interested in one of these radios should contact me as soon as possible for a demonstration.

The club is looking to upgrade its HF radio so we are looking for a newer solid state radio. Any club member that has a radio he would like to sell should contact me, Don Russell, W8PEN, as above. The committee looking at newer radios will consider any brand, however, the minimum specs require the radio to have an auto antenna tuner (ATU) and be capable of 100 watts output.

The Mt. Vernon Amateur Radio Club

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Members are encouraged to send articles pertaining to Amateur Radio, with an emphasis on local activity, equipment reviews, and personal experiences to the Newsletter Editor. Articles are due on the Sunday before the first Monday of the month.

Newsletter Editor: **Don Russell, W8PEN**
w8pen@arrl.net

FREE FOR THE TAKING

From the Ohio Section News for August 23, 2013

ICOM has an online Amateur Radio Tool Kit where you can download free digital copies of the tool Kit. The Tool Kit consists of:

U.S.A. Amateur Band Plan – a color-coded chart of the US ham radio bands and country codes

New Rules for the 60 Meter (5 MHz) Band - On November 18, the FCC released a Report and Order (R&O), defining new rules for the 60 meter

U.S.A. Amateur Grid Square Map - An invisible grid, based on 1° latitude by 2° longitude, encompasses the globe and is used for geographic location and identification

Ham Radio Terms - glossary contains general definitions of typical amateur radio terms for new and experienced operators alike

CQ DX Zones of the World - a double-sided world map showing the CQ DX Zones and the ITU Zones. Each map uses an Albers Equal Area projection. With color-coded regions and a list of country codes, this map serves as an illustrative tool to help you in any DX adventure!

Check out the ICOM website to download the kit. Here is the link:

http://icomamerica.com/en/amateur/amateurtools/default.aspx –

SPECIAL EVENT STATIONS IN OHIO

This is also from the Ohio Section News, August 23rd.

09/01/2013 | QCWA Chapter 212 10th Anniversary Sep 1-Sep 30, 0001Z-2359Z, WQ8CWA, Newark, OH. QCWA Mid-Ohio Chapter 212. 21.365 14.262 7.244 3.810. QSL. Bob Cashdollar, 1319 Granville Rd, Newark, OH 43055.

This is a month long celebration of the 10th anniversary of the Quarter Century Wireless Association (QCWA) MID-OHIO Chapter 212. Just like the old days a stamped QSL card will be sent to all stations. SASE is not required. www.qrz/db/wq8cwa

09/07/2013 | 125th Anniversary of Corwin OH Circus Train Wreck Sep 7, 1600Z-2359Z, W8C, Corwin, OH. West Chester Amateur Radio Association. 21.350 14.250 7.250. QSL. Mike Braun, PO Box 913, West Chester, OH 45071. Also working the OSPOTA event same day. wc8voa.org

09/07/2013 | Ohio State Parks On the Air Sep 7, 0800Z-1400Z, W8NCK, Fremont, OH. Sandusky Valley Amateur Radio Club. 7.240. QSL. John B. Stahl, 1700 County Rd 157, Fremont, OH 43420. johnbstahl@gmail.com

09/07/2013 | Williams County Fair Sep 7-Sep 13, 0900Z-2300Z, W8JDM, Montpelier, OH. Williams County Amateur Radio Club. 14.225. Certificate. Williams County ARC, 3440 County Rd 9, Bryan, OH 43506. Our club will have a booth at our local county fair with radios in operation to demonstrate Amateur Radio to the Public www.w8jdm.org

09/14/2013 | National Road & "S" Bridge-185 years old Sep 14, 1400Z-2200Z, W8VP, Cambridge, OH. Cambridge Amateur Radio Association. 14.260 7.235. Certificate & QSL. Cambridge Amateur Radio Association, PO Box 1804, Cambridge, OH 43725. Celebrating 185th anniversary of the National Road & "S" Bridges. 9th Special Event in CARA's year-long 100th Birthday Celebration. QSL. Certificate available for anyone who works ALL 12 of CARA's monthly Special Events of 2013 www.w8vp.org

09/21/2013 | 69th anniversary of the dedication of the Voice of America Bethany Relay Station near Cincinnati, Ohio

Sep 21, 1600Z-2359Z, WC8VOA, West Chester, OH. West Chester Amateur Radio Association. 21.350 14.250 7.250. Certificate & QSL. Mike Braun, PO Box 913, West Chester, OH 45071. wc8voa.org

09/22/2013 | MARA Annual Swap Meet Sep 22, 1200Z-1700Z, W8DYY, Miamisburg, OH. Mound Amatuer Radio Association. 14.235. QSL. Mound ARA, PO Box 1262, Miamisburg, OH 45342. www.w8dyy.org

You Might be a Ham Operator if…

A friend remarks that you have a lot of CBs in your vehicle, and it turns into an hour-long rant on how ham radio is not CB.

Your cell phone ring tone is a Morse code message of some kind.

You have accidentally said your Amateur Radio call sign at the end of a telephone conversation.

The local city council doesn't like you. You actually think towers look good.

Your HF amplifier puts out more power than the local AM radio station.

You refer to your children as your "harmonics".

You have pictures of your radio equipment as wallpaper on your computer's desktop.

Every family vacation includes a stop at a Ham radio store.

The first question you ask the new car dealer is: "What is the alternator's current output"?

You buy a brand new car based on the radio mounting locations and antenna mounting possibilities.

You have tapped out Morse code on your car's horn.

You always park on the top floor of the parking deck, just in case you might have to wait in the car later.

When house hunting, you look for the best room for a radio shack, scan the property for possible tower placement and check for CCRs.

The real estate agent scratches his head when you ask if the soil conductivity is high, medium, or low.

You have Ham radio magazines in the bathroom.

You have found yourself whistling "CQ" using Morse code.

You really start to miss people that you've never met.

You walk through the plumbing section at the hardware store and see antenna parts.
-- Author unknown

VHF/UHF WORLD

By Don Russell, W8PEN

This article is a reprint from the January 2008 issue of the Newsletter.

An Introduction to WSJT

Here is a secret many of you may not know about our VHF and UHF bands: There is more to it than just FM! Okay, most of you know that if you wished, you may run SSB or CW on 6 and 2 meters and 432 Mhz. Some of you may even have tried. By the way, calling frequencies for SSB are 50.125 Mhz, 144.200 Mhz., and 432.100 Mhz. I monitor these frequencies at times and usually hear activity in the evening. Standard procedure is that one calls CQ on the calling frequency and when a contact is established, the two stations move up or down frequency so that someone else may call CQ. This keeps the calling frequencies clear for all to use. Remember, SSB uses horizontal antennas so it is best that you match that. However, I switched to vertical polarization this summer on 2 meters and 440 Mhz. I still hear SSB activity on these bands. So don't let your antenna polarization stop you from trying.

Both SSB and CW have many advantages over FM that make them the communications mode of choice for skip and weak signal contacts. The main disadvantage I see is that when monitoring a frequency, you always here the background noise; plus, if not tuned in properly, SSB does sound a bit Donald Duck-ish. Not as good on the audio quality as FM.

One mode that has always interested me has been working stations via meteor tails, or what is called Meteor Scatter. The idea behind this mode of communications is that when a meteor hit's the earths atmosphere, it leaves an ionized tail behind it that can reflect radio signals. Interesting isn't it? This is not new. Hams have been doing this at least since the 1960's, when SSB became popular. I actually did some meteor scatter work during ARRL VHF contests when 6 meter SSB was King. When the band was dead, the only way to work them was via meteor scatter!

Meteors hit the earths atmosphere all the time, 24 hours a day, seven days a week. Theoretically, one can use this mode at any time of the day. Best chance of success is in the early morning hours between 1:00 AM and 4:00 AM, plus or minus some. Something to do with the inclination of the Earth to the meteors. Ask Doc, AA8WP. I have, however, copied meteor scatter signals as early as 9:00 PM, so don't let the early morning hours scare you off. Especially during one of the many Meteor Showers throughout the year.

In the past, the only way to do Meteor Scatter was with SSB or CW. CW was the common choice because it had more punch. Meteor Scatter on 6 meter SSB is rather easy. Even 10 meters supports Meteor Scatter contacts using SSB. Attempting this mode of communications on 2 meters is much more difficult. Here, CW has been the mode of choice.

That is until about 6 years ago, when Joe Taylor, K1JT developed a program called WSJT. WSJT, as many of you might know is a digital soundcard program that supports mode FSK441 for High Speed Meteor Scatter, mode JT6M optimized for meteor and ionospheric scatter on 6 meters, mode JT65 for Earth-Moon-Earth (EME) and weak signal troposcatter, and CW for EME using timed, computer generated transmissions. Quite a bit for a program in the public domain (meaning free to use by everyone).

This program is allowing successful Meteor Scatter, EME, and troposcatter contacts between hams with very modest equipment. System requirements are simply an SSB transceiver capable of one or more VHF/UHF bands and matching antennas (preferably a beam antenna). You will also need a computer with Windows, Linux, or

FreeBSD operating systems. Computer requirements are modest, needing an 800 Mhz or faster CPU and soundcard. If you have a slower computer, it is recommended that you download WSJT Version 4.9.8

The last requirement is some kind of soundcard interface. These can be built rather cheaply. Commercial versions are reasonably priced for just the basics. Here is a good source of information on soundcard interfaces:

http://www.qsl.net/wm2u/interface.html

If all you want to do is listen, all you need is a patch cable from your headphone jack to your soundcard line input. You can make one or go to Radio Shack.

Here is the link for downloading this software and documentation:

http://physics.princeton.edu/pulsar/K1JT/

Click Download on the left, then follow instructions. While you are on this page, scroll down and download the samples file. This file is used in the WSJT tutorial that is included with the documentation. You will also find WSJT Version 4.9.8 by scrolling down. Then Click Documentation on the left and download that file. The documentation is very good and includes a primer to get beginners started.

If you have a computer, but no internet, let me know. I am willing to put these files on a CD for you. Perhaps I will bring a few CD's with these files to the January meeting.

Since the documentation is very well written, I am not going to try and explain how to set up the software. If you are interested enough in WSJT, then you will certainly have the program and documentation in hand shortly. If you are expecting a full blown rag chew QSO, then you can stop reading right here. This program allows for the minimum amount of information to be exchanged in order to make verified, or good contact. This being call letters and some exchange of information, which on the VHF bands is usually grid squares.

Requirements for a QSO:

Exchange of both call signs
Exchange of information or report
Exchange of confirmation

All exchanges above must be copied via Meteor Scatter Pings only with **NO OUTSIDE HELP!**

If you are more interested in EME, the exchange information may be different. Here are links to go to if you are interested in EME:

http://web.wt.net/~w5un/

And here:

http://www.qsl.net/g0isw/g0isweme.htm

Schedules may be arranged, which makes it easier to complete a good contact. Using a schedule, you will already know your partners call letters. Even so, the call must be decoded by the software on a Meteor Ping to make it a good contact.

Here is a good site to make schedules with other stations:

http://www.pingjockey.net/cgi-bin/pingtalk

Random contacts using CQ are much harder, but not impossible.

I understand that Meteor Scatter on 6 meters is much easier than on 2 meters, so perhaps one should start out on 6 meters. That being said, I have actually decoded signals on 2 meters. I have heard very little on 6 meters.

Frequencies to monitor are 50.260 Mhz and 144.140 Mhz. All Meteor Scatter work with WSJT uses USB (Upper Sideband). Using the link from above, you can see what frequencies others are using and listen in on their attempt at a QSO. This is a very good way to learn

I admit to not putting enough effort into this mode to actually make a QSO. I have, however listened in on contacts in progress. Perhaps I will give it a try.

NORTHERN OHIO WIDE AREA UHF REPEATER LINKS

MT. VERNON, OHIO	442.100/+ 71.9
APPLE VALLEY, OHIO	FUTURE
MARENGO, OHIO	FUTURE
MANSFIELD, OHIO	443.075/+ 151.4
ELYRIA, OHIO	443.9875/+ 162.2
VERMILLION, OHIO	53.290/52.290 107.2
SANDUSKY, OHIO	146.805/- 110.9
GIBSONBURG, OHIO	443.1875/+ 107.2
POLK, OHIO	443.675/+ 162.2
REPUBLIC, OHIO	147.255/+ 107.2
REPUBLIC, OHIO	443.4375/+ 107.2
BERLIN HEIGHTS, OHIO	442.675/+ 162.2

Please note the frequency/split(+ or – 5 Mhz) and CTCS in hertz.

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 and for those over 65 yrs. of age.

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_____

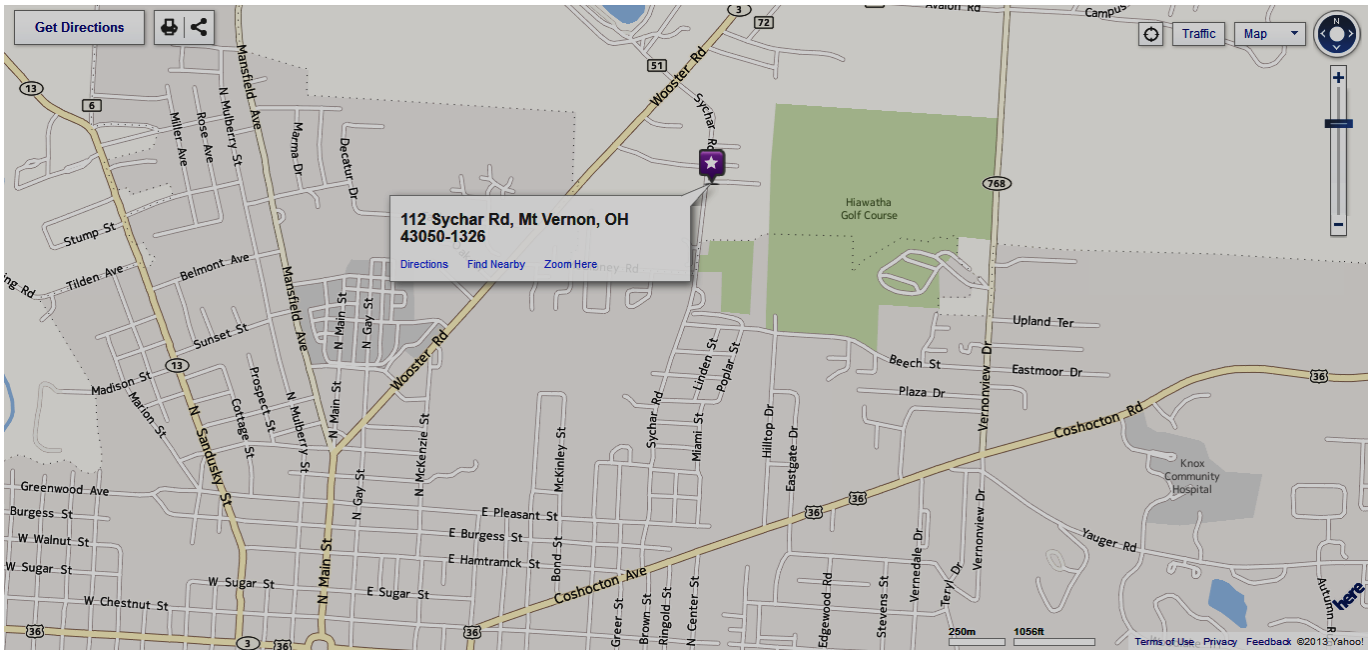
ARRL Member (Y/N)_____E-Mail_____

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:



Club meeting will be September 9th at Hiawatha Park, 112 Sychar Rd, Mt. Vernon, Ohio