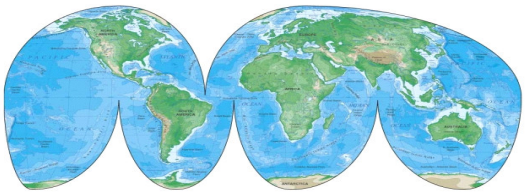
MOUNT VERNON AMATEUR RADIO CLUB

C  Q

January 2006 Newsletter

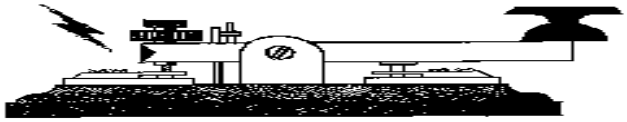
MEETINGS SECOND MONDAY OF THE MONTH AT THE RED CROSS ANNEX BUILDING,
300 N MULBERRY ST, MT. VERNON, OHIO
REPEATER FREQUENCIES: 146.790 (-) K8EEN /R 444.750 (+) KC8YED /R 53.790 (-) WA8YRS/R
SUNDAY NIGHT ARES NET AT 8:00 P.M ON THE K8EEN REPEATER OPEN TO ALL

FROM THE EDITOR

There are a couple of important items from the December meeting that needs a bit more attention, so I thought I would share these with the readers first off. One is that our by-laws state that the last Newsletter for those who have not renewed their dues will be the January issue. So be warned. If you have not paid your dues for 2006 by the January meeting, you will miss a great February Newsletter. The other item that should be mentioned is that while we did not have the annual Club Christmas dinner at Ryan's this year, the dinners in the past have proved popular enough that the club has decided to schedule a dinner at Ryan's for our February meeting. The date will be February 13, 2006. The time will be 6:00 p.m.. This dinner has not been scheduled at Ryan's yet, but it will be in the near future.

Another note of interest is the Newsletter itself. I have been using a fairly large font for the printing of the Newsletter. I will be reducing this font just a bit so that more articles may make it to the Newsletter. A font size is the actual size of the printed character. While I prefer larger characters myself, I think this reduced font will not be a problem for readers. The only ones effected by this change will be the members receiving the Newsletter by mail. The ones down loading the Newsletter from the Clubs Web Page and reading it on their computers can simply enlarge the print themselves for easy reading. Let me know if anyone has a problem with this.

Enjoy the Newsletter. Your comments are always appreciated.



ComPlOnents
By Mike McCardel, KC8YLD

Merry Christmas. Happy Hanukkah, Joyful Kwanza, Gleeful Winter Solstice, Peaceful Pagan Holidays, Happy Holidays!!! One thing great about Amateur Radio is that there is a place for you, whoever you are or what you believe. I consider myself to have healthy respect for all people. I have found most radio operators to be respectful, courteous and extremely benevolent. So regardless of your faith, beliefs or how you choose to celebrate this winter season, may the words, HAPPY, JOYFUL, MERRY, GLEEFUL, PEACEFUL ring in your ears and how you go about life. Enjoy family, friends, neighbors and you radio buddies.

New Years resolutions. Mine are simple. Love more. Spend more quality time with family. Fix the house. Somehow find some radio time. Help promote Amateur Radio. Since this is a radio related article I'll spend a couple quick moments discussing the latter two resolutions. More radio time... don't we all wish we could be on the air a little more. Some of the things I hope to do are, make some CW contacts. Hopefully by the time you read this I will have the opportunity to try out Straight Key Day January 1st. Zach got my old TS-520 and an antenna for Christmas, so we are hoping to do a little CW short range. Maybe come Field day I'll have the confidence and courage to try some CW contacts and help get some extra points. I've become very interested in message handling and have been monitoring the Ohio Single Side band Net (OSSBN 3972.5 KHz, Dailey, 10:30 A.M., 4:15 P.M., 6:45 P.M.(Local time)). So I'm resolving to join OSSBN and NTS and start handling some traffic.

Amateur Television is something new I would like to learn more about. So is digital transmission. I hope to try both of these before the year is out. As for promoting amateur radio, I hope to talk a couple more of my children into the hobby. I plan to continue the work as PIO and get amateur radio some positive press. I hope to mentor somebody through becoming a ham this year. All are achievable resolutions, so I better get the bathroom spackled, a new floor in the back foyer, wallpaper the living room and dining room... well you get the message.

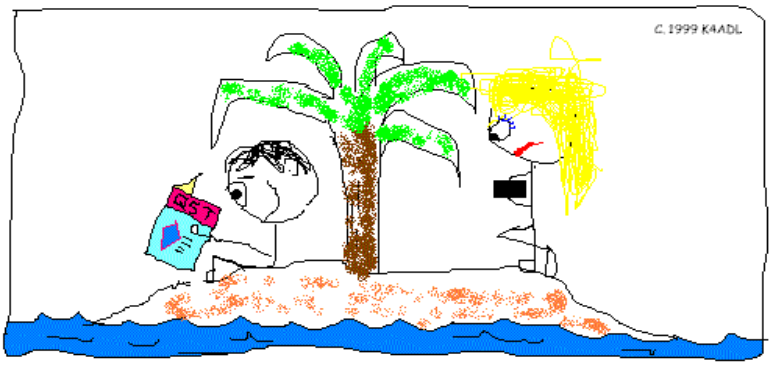
Thinking of the Holidays, Christmas, giving, and toys, I recently started playing with widgets. Widgets are java script screen applications made popular by Apple when they came native with their release of Tiger (OS-X10.4). Widgets are also available for windows. Go to widgets.yahoo.com. They recently took over Konfabulator Widgets. You can download the widgets program and visit the widget gallery for more widgets. The widget toys I've enjoyed playing with are Streamguage which shows me stream levels and water flow of a variety of creeks and rivers nationwide, including the Kokosing River at Mount Vernon. An OHMs Law Calculator, A DX Cluster from DXZone, Earthfall which shows a map of the world and how it is lit by sunlight at the present, an ISS tracker, a weather alert, weather forecasts and reports, clocks (digital and analog), google and yahoo search interfaces, radar images, amber alerts and of course "up to the minute" Homeland Security Status (Its always Yellow! hi, hi). Widgets can be run as always on top or in the background waiting to display by tapping the F8 key. Best of all they are free. If you know java script you make your own.

Congratulations! to Ruben, KB2SAI for his re-election as president, Don, WA8YRS for his reelection as Vice-President, To Bob, N8PCE for his reelection as Treasurer, and Jeff, N8SMT for his election as Secretary. The meeting program is "Show and Tell." Yes just like elementary school. Everyone is asked to bring something to show and tell about it. This months meeting will be held Monday January 9 at 7pm at The American Red Cross Annex. Agenda items include election of Directors, tabled from December's meeting, and a look at the by-laws. Ruben has posted a current copy of the by-laws to the club website, www.mvarc.com.

I encourage everyone to stay informed with District and State issues by visiting the District 6 website at http://www.iarc.ws/dec6/ and the Ohio Section webpage http://www.iarc.ws/ohio/ . The recent Mount Vernon News article about hams is linked from the Ohio Section page. The District Emergency coordinator Jay Bookwalter publishes the District 6 ARES Newsletter and the quarterly Ohio Section Journal is Published by Joe Phillips, K8QOE and Edited by Ron Griffin, N8AEH. Each can be found online at their respective websites.

I hope all have had a great Christmas Holiday and New Year's Celebration and hope to talk to you, on down the log. Get On The Air!

73 de KC8YLD, E. Mike



MAROONED WITH HIS NEW BRIDE AND THE LATEST ISSUE OF "QST," WALTER SETTLES IN FOR THE LONG WAIT TO BE RESCUED.

FROM THE ARRL LETTER:

ISS COMMANDER SHOOTING FOR WAC, WAS AND MAYBE DXCC FROM SPACE

ISS Expedition 12 Commander Bill McArthur, KC5ACR, has proven to be one of the more active Amateur Radio on the International Space Station (ARISS) operators among ham radio operators who have occupied the space station. Early in his ISS duty tour, McArthur got on the air from NA1SS for Scouting's Jamboree On The Air (JOTA) event in October, but he's also been available during his off hours to make some quick, casual QSOs on 2 meters as well. In fact, McArthur's having so much fun operating from space that he's hoping to complete Worked All Continents (WAC), Worked All States (WAS) and maybe even DXCC from space.

"Bill McArthur continues to be active on voice and now has a couple of personal goals he is trying to achieve," says ARISS Ham Radio Project Engineer Kenneth Ransom, N5VHO. "He is trying to talk to someone in every state in the United States. According to his log, he has managed to work 37 states so far." In addition, Ransom says, McArthur wants to work as many countries as he can.

"He's off to a good start with 28 DXCC entities in his log as of December 12," he said. "These contacts have been with amateur stations on every continent with the exception of Antarctica." That contact could happen this weekend, however. Although the IARU does not require WAC applicants to have worked Antarctica, Ransom says that ARISS tradition calls for an Antarctica QSO to achieve WAC from space "since the astronauts seem to have an unfair advantage."

Expedition 9 astronaut Mike Fincke, KE5AIT, became the first ISS crew member to contact all seven of the

world's continents via Amateur Radio from NA1SS. Fincke worked KC4AAC at Antarctica's Palmer Research Station for his last contact.

States on McArthur's most-needed list are Alaska, Hawaii, Idaho, Missouri, New Hampshire, New Mexico, North Dakota, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia and Washington.

"The list of DXCC entities is just starting to grow, so he needs a lot right now," Ransom conceded this week. "I figure he can get it if we are able to add a handful of smaller entities." Ransom says he hasn't included ARISS school group contacts in his counts and hopes McArthur will achieve his goals without them. "We won't know the official results for months after the mission," he added.

McArthur is about halfway through his approximately six-month duty tour aboard the ISS. He and crewmate Valery Tokarev will return to Earth in April.

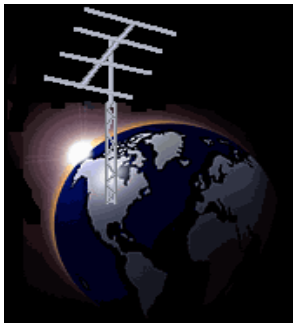
During Thanksgiving week, McArthur reportedly made some three dozen casual contacts, most of them over North America and a few over Europe and New Zealand. Nine-year-old Mattie Clausen, AE7MC, of Oregon recently enjoyed her third QSO with McArthur, and the two now are on a first-name basis. McArthur made contacts with stations in the US on December 6. He also had QSOs with Australia, New Zealand and the US on December 11.

The NA1SS worldwide voice and packet downlink frequency is 145.800 MHz. In Regions 2 and 3 (the Americas, and the Pacific), the voice uplink is 144.49 MHz. In Region 1 (Europe, Central Asia and Africa), the voice uplink is 145.20 MHz. The worldwide packet uplink is 145.99 MHz. All frequencies are subject to Doppler shift. The Science@NASA Web site provides location information for the ISS

<http://science.nasa.gov/temp/StationLoc.html.

The Amateur Radio on the International Space Station (ARISS) <http://www.rac.ca/ariss program is an international educational outreach with US participation by ARRL, AMSAT and NASA.

SAVING HAM RADIO
BY DON RUSSELL, WA8YRS



Much has been said over the last several years about the state of Amateur Radio. Some claim that Ham Radio is a dying hobby and that the Internet will eventually take over as being the "Technical" hobby of the world. Others say that our hobby is alive and well and that no changes are necessary for the continued existence of our hobby well into the twenty first century. One has to wonder though: Why is the average age of a Ham Radio Operator around 55 years old?

I believe that the FCC made a mistake when they removed the Morse Code requirement from the Technician Class license. Not for the reasons you might think. Removing the Morse Code requirement did indeed cause an influx of new hams, mostly of the Technician Class type. Problem is that many of these newly licensed hams quickly found out just how limited their privileges were. Typical communications range on our popular 2 meter FM band is under 100 miles. Not very exciting. Occasionally, the 6 meter band will open up and provide some excitement via skip. Even some DX may be worked. Unfortunately, many new hams are not even aware of 6 meters. Many Technician Class hams soon became inactive. Currently there are a lot of hams in the United States. A good percentage have been inactive most of their careers. Now, I am not taking anything away from the VHF/UHF bands or FM repeaters. I find these bands very interesting. FM provides a community channel where local hams can communicate daily. In the 60's, we had nothing like repeaters to keep us in touch with the locals. However, unless Amateur Radio and the FCC does something, I am afraid that we may indeed be in a dying hobby.

I said the FCC made a mistake by removing the Morse Code requirement from the Technician Class license. More to the point, they did not go far enough! The Technician Class license soon became the "entry level" license. There was still the Novice license, but you had to learn Morse Code to get this license. So, the Novice Class slowly faded away and no longer exists. By international law, hams had to learn Morse Code to be allowed on frequencies below 30 MHz., so the FCC is not entirely to blame. This international law was changed recently.

We, as devoted members of the Ham Radio community have a responsibility to insure the continued existence of our Hobby. How can we do this? The best and most efficient way to give our hobby a boost is to attract children and young adults into our hobby. Not an easy task, but I believe it can be done. With or without the FCC's assistance.

The FCC should create a Novice Class license with a test more suitable for the beginning communicator. This test should consist of rules and regulations and operating procedures only. The Novice Class license should have enough privileges to make it an exciting experience to get on the air, but only be good for two years and non renewable. In the old days, Novices had three bands: 80, 40, and 15 meters. They were only allowed to use Morse Code on these bands and they were limited to 75 watts. Each band was 50 KHz. wide and provided many new hams an exciting experience in radio. Enough to

make them want to upgrade. I was there. The Novice bands were packed with activity 24 hours a day! By exciting, I mean the ability to talk to someone out of state or even out of the country. That is what ham radio was all about back then. A new Novice license needs to be created with privileges similar to the old Novice bands, except they need to be in the phone portion of the band. A bandwidth of 50 to100 KHz. would be suitable. In addition to phone privileges, perhaps a 25 KHz. segment of our digital band would also be appropriate. PSK 31 would be a very attractive mode for kids who are used to being at the computer. A Novice could experience two worlds of ham radio. For those newcomers wanting to operate on the 2 meter band, they would still be required to obtain the Technician Class license.

It is likely that the FCC will not create a Novice license. We as keepers of our hobby must find a way to encourage youngsters to join us. We must find attractive ways to introduce children and young adults to our wonderful hobby. How can we do this?

As mentioned, a major problem with the Technician Class license is the lack of a rewarding experience while communicating with other hams. Think back a few years (okay, a lot of years for some of us!), when you were a teenager. Would you have studied for a ham radio license just to be able to get on a repeater and talk to adults? I think not! I suggest that each community set up a repeater system that would cater to the teenager and younger hams. No adults would be allowed on these repeaters except in times of emergency. Of course, adults (the repeater control operators) would monitor the repeaters to keep them a safe haven for the younger hams. As long as the users of these repeater systems obeyed the FCC regulations, they would be free to communicate how they wished to with people their own age. Now, that would be something fun and exciting! Since all the 2 meter frequencies are used up, these repeaters would have to be on UHF. But that is not a problem because UHF equipment is becoming more popular every day. Actually, 220 MHz. would be ideal for this, but there just isn't any equipment available at a reasonable price.

Now we have a repeater in place but no kids to use it. Darn! What do we do? Local ham radio clubs should contact schools, Boy scout, Cub Scout, Girl Scout troops, and even the Big Brothers and Sisters. They offer to come in and teach the kids about ham radio. We demonstrate this repeater system that the kids can use without adult interruptions or criticisms. Hey, it could work!

Editors note: This article was written before the January 2006 QST was published. In “It Seems to Us”, the ARRL discusses adding HF privileges to the Technician Class Amateur Radio License. The editor strongly supports this action as a positive step in attracting the younger generation to Ham Radio.

ARRL EXPERIMENTING WITH ICOM D-STAR DIGITAL SYSTEM (From the ARRL Letter)

Thanks to the generosity of Icom, MFJ and NCG (Comet), the ARRL has embarked on a project to learn firsthand what D-Star digital technology has to offer and to assess its capabilities in a real-world Amateur Radio environment. Icom, so far the only ham radio manufacturer offering D-Star equipment, has donated a D-Star voice repeater, data repeater and controller to W1AW. Eight model ID-1 D-Star 10 W mobile transceivers are on loan from the manufacturer.

"We appreciate Icom's cooperation and support as we explore D-Star's capabilities and learn more about digital radio systems," ARRL CEO David Sumner, K1ZZ, said in expressing the League's gratitude.

MFJ donated an MFJ-1532N Pulsar, which is serving as the transmitting antenna, while NCG contributed a pair of Comet GP21 antennas to receive digital data and voice for the 1.2 GHz (23 cm) multipurpose D-Star system. The antennas have been installed on two of the W1AW antenna support structures.

Although still in the early phase, the project plans to exercise the technology's digital voice and data capabilities as well as its capability to become part of a wider D-Star digital repeaternetwork via an Internet gateway.

Icom Amateur Products Division Manager Ray Novak, N9JA, says the D-Star standard, first published four years ago, resulted from government-funded research in Japan administered by the Japan Amateur Radio League (JARL) to investigate Amateur Radio digital technologies. Novak emphasizes that D-Star is an open protocol that's available for implementation by anyone, and Icom is working with other manufacturers to get more D-Star compatible gear on the market.

"Amateur Radio is again out there in the forefront of technology," Novak says. Although he concedes there's a steep learning curve ahead, he predicts Amateur Radio users will invent new ways to put D-Star technology to work as they get better acquainted with its possibilities.

At this stage, the D-Star 23-cm repeater is up and running in digital voice mode, and W1AW Station Manager Joe Carcia, NJ1Q, and ARRL Web and Software Development Manager Jon Bloom, KE3Z, enjoyed the first contact through the repeater on November 30. In the meantime, Bloom has been working

to interface the D-Star system with a Linux server, which will serve as an Internet gateway, to check out that aspect of the system.

Novak says the digital voice stream can simultaneously handle voice at 3600 bps with error correction and data at up to 1200 bps. Since a D-Star voice signal occupies only 6.25 kHz, Novak says, the potential is there to make more efficient use of available spectrum on 2 meters by squeezing up to four D-Star repeaters into the same space as two analog channels. New repeater modules are in development for 2 meters and 70 cm.

Working through a D-Star repeater is a bit different than using an analog repeater. Your call sign is the key to a D-Star system, since it's incorporated into every transmission you make. "Because of D-Star's call sign-routed system," Novak explained, "registered users are able to cross-communicate with stations registered on another network's D-Star repeater, wherever it may be."

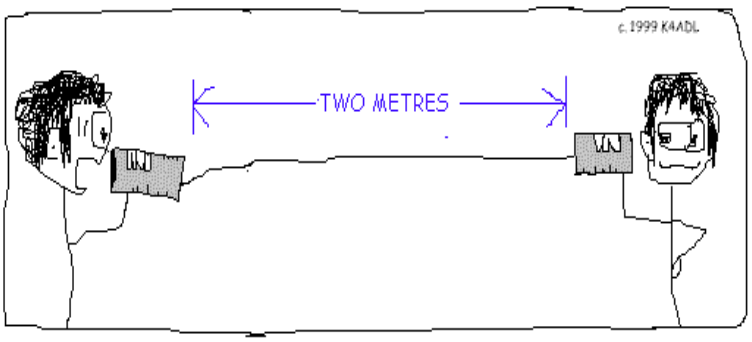
Novak says the 1.2 GHz D-Star system's high-speed (128 kbps) data capability is another exciting feature. With the Ethernet jack on the Icom ID-1 transceiver, you now have the functionality of an ISDN (integrated services digital network) line available in your vehicle," Novak said.

"We'll have to find new ways of using this technology," he continued. "That will be where ham radio changes. This opens up an unbelievable array of features for repeater systems--including graphics, schedules, tables, photos, you name it!"

A D-Star Last Heard Report Web page

<http://www.dstarusers.org/

lists stations heard, their location and the date and time and, sometimes, type of transmission. The K5TIT Dallas D-Star Web site <http://www.k5tit.org/ includes a repeater listing and a discussion forum, and a promise of more to come.



THE EARLY YEARS

NEW BUSINESS CARD SECTION FOR THE NEWSLETTER

At the November meeting it was discussed having a business card section in the Newsletter. This section would be on the last page of the Newsletter and would replace what now is an advertisement page of sorts. The idea is for those members wanting their business card printed in the Newsletter to scan their business card and send it via email to Don, WA8YRS (wa8yrs@arrl.net). If you have no way of scanning your business card but would like to have it appear in the Newsletter, then you may mail it to Don Russell, 815 Brookwood Rd., Mt. Vernon, Ohio 43050. Don will then scan it and post it in the Newsletter. Even better, come to a meeting and hand it in personally. The only rule is that you must be a member of the Mt. Vernon Amateur Radio Club to take advantage of this offer. The policy for posting cards will be that only one page will be used for posting business cards. If more cards are received than there is room for on one page, then cards will be rotated monthly.

Upcoming Events (From the ARRL):

January:
- 1 straight key night
- 7-8 RTTY round-up
- 8 Kids Day
- 14-15 North American QSO Party – CW
- 20 Board of Directors meet
- 21-23 Jan VHF Sweepstakes
- 21-22 North American QSO Party - Phone
- 28-29 CQ WW 160m CW contest

February :
- 5 North American phone sprint
- 11-12 CQ WW WPX RTTY Contest
- 12 North American CW sprint
- 13-17 School club round-up
- 18-19 ARRL International DX Contest CW
- 25-26 CQ WW 160m SSB Contest
- 25-26 North American QSP Party - RTTY

See the ARRL web page for more information of any of the events.

- ARRL Certification and Continuing Education course registration: Registration remains open through Sunday, January 8, for these ARRL Certification and Continuing Education (CCE) Program on-line courses: Amateur Radio Emergency Communications Level 2 (EC-002), Amateur Radio Emergency Communications Level 3 (EC-003), Antenna Modeling (EC-004), VHF/UHF Beyond the Repeater (EC-008), Radio Frequency Propagation (EC-011) and HF

Digital Communications (EC-005) Classes begin Friday, January 20. To learn more, visit the CCE Course Listing page:

<http://www.arrl.org/cce/courses.html>

Or contact the CCE Department: <cce@arrl.org>.

REPEATERS AND STUFF
BY DON RUSSELL, WA8YRS

Welcome to 2006. Before I turn to another subject, I do have a few things to report on our Knox County Repeaters. Number one on the list is to say that the narrow band filter Barry, N8PPF, and I installed seems to be doing the trick. We have had no interference on the 2 meter repeaters input frequency since the installation. Actually, Barry did the work. I just stood there and watched. Things are much better now and the repeater is performing great.

Status of the 440 repeater is the same as last month. It is not getting much use what with Barry and I playing with the 6 meter repeater. It is always there though. I am encouraged by Steve, KC8YED, who reported that we may be allowed to move the repeater to Gambier, using one of Kenyon's tall buildings. From what I understand, there is at least one commercial repeater there and it has very good coverage. It will be interesting to see how well a 440 repeater covers Apple Valley from Gambier. I think it will work just fine in Gambier, with the exception of possible reduced hand held coverage in Mt. Vernon. That will be okay though. We need something a bit more East to use that may provide better coverage in that area than our 2 meter repeater does.

The 6 meter repeater is coming along slowly. Everything is official now. We have been coordinated with the Ohio Repeater Council. Hand held coverage is not the best. This is because of the "make do" nature of a rubber ducky antenna on 6 meters. Mobile wise we have good coverage to Johnstown, Condit Station, and I believe at least to the Lexington and Bellville areas. We still have some improvements to make. Once we get the high gain receive antenna up in the air, I expect coverage to be much better. We can also double our transmit power if we decide to do so. There are a lot of things to be tried. Those not playing with this repeater are missing out.

I would like to continue discussing antennas, as I did last month. If you are a ham on a budget you may have no chance to put up a tower with a big beam antenna at the top. Or you may not be interested in having a lot of aluminum hanging over your house. There are some very effective alternatives. This month and next I plan on presenting two wire antennas that will cost little but have outstanding performance. First, I will talk about a "V" beam antenna for 20 thru 10 meters. Next month we will handle phasing verticals for 20 meters to get some gain and low angle radiation to work DX without straining the budget.

The "V" beam is not a real popular antenna in ham radio. One of the reasons for this is that it takes a lot of property to put one up. For its size, the gain is not as good as a three or four element yagi. It does contend nicely with a three element tri-band beam however. The "V" beam does have a few advantages, however. Wires of a "V" beam can be just thick enough to support its weight and be colored so that they are not very noticeable. It makes the neighbors happy. One does not need a huge tower with a very expensive rotator for a "V" beam to be effective. Having much more surface area than any yagi beam would have, a "V" beam is said to be better on receive than the typical ham radio beam. So if you have a little room, one should check into the "V" beam antenna.

Preparing for this article, I researched the ARRL Antenna Book. It has lots of graphs and radiation patterns to study. I am not going to repeat what the ARRL has published. If you wish to learn more about "V" beam antennas, you should buy or borrow the antenna book and read up on it.

A "V" beam is nothing more than two wires that are at least one wavelength long on its lowest operating frequency, formed into a horizontal "V". Like an inverted "V", only strung horizontally. In the ARRL antenna book examples, the "V" beam is one wavelength above ground at the feed point and both end points. I think it is a little bit of a stretch to expect everyone to have the capability to put this antenna up that high. My "V" beam would be about 40 feet at the feed point and 20 feet at the ends. Actually, tilting the "V" beam in such a manner is supposed to give it a bit more gain (in theory), however, several factors that are beyond the scope of this article makes this fact not so accurate in reality. The shortest length for each leg of a "V" beam for 20 thru 10 meters would be about 67 feet (one wavelength at 20 meters). Much better results will be had if the antenna length could be doubled or tripled (two or three wavelengths at 20 meters). One wavelength does give gain over a dipole at the same height. There is an optimum leg separation depending on what frequencies you wish to operate on. For the 20 thru 10 meter "V" beam, this would be 80 to 85 feet separation of the end poles. So, my beam would be 40 feet high at the feed point, and 20 feet high at the ends, with the end poles or trees separated by about 85 feet. Dimensions are not all that critical. Be a ham and experiment with what you have available. Since I have a tower, I would place my feed

point at about the 40 feet level. Yours could be a tree, a pole, edge of your house, etc. Make do with what you have. The lowest height I would use though would be around 20 feet at the feed point and 10 feet at the ends.

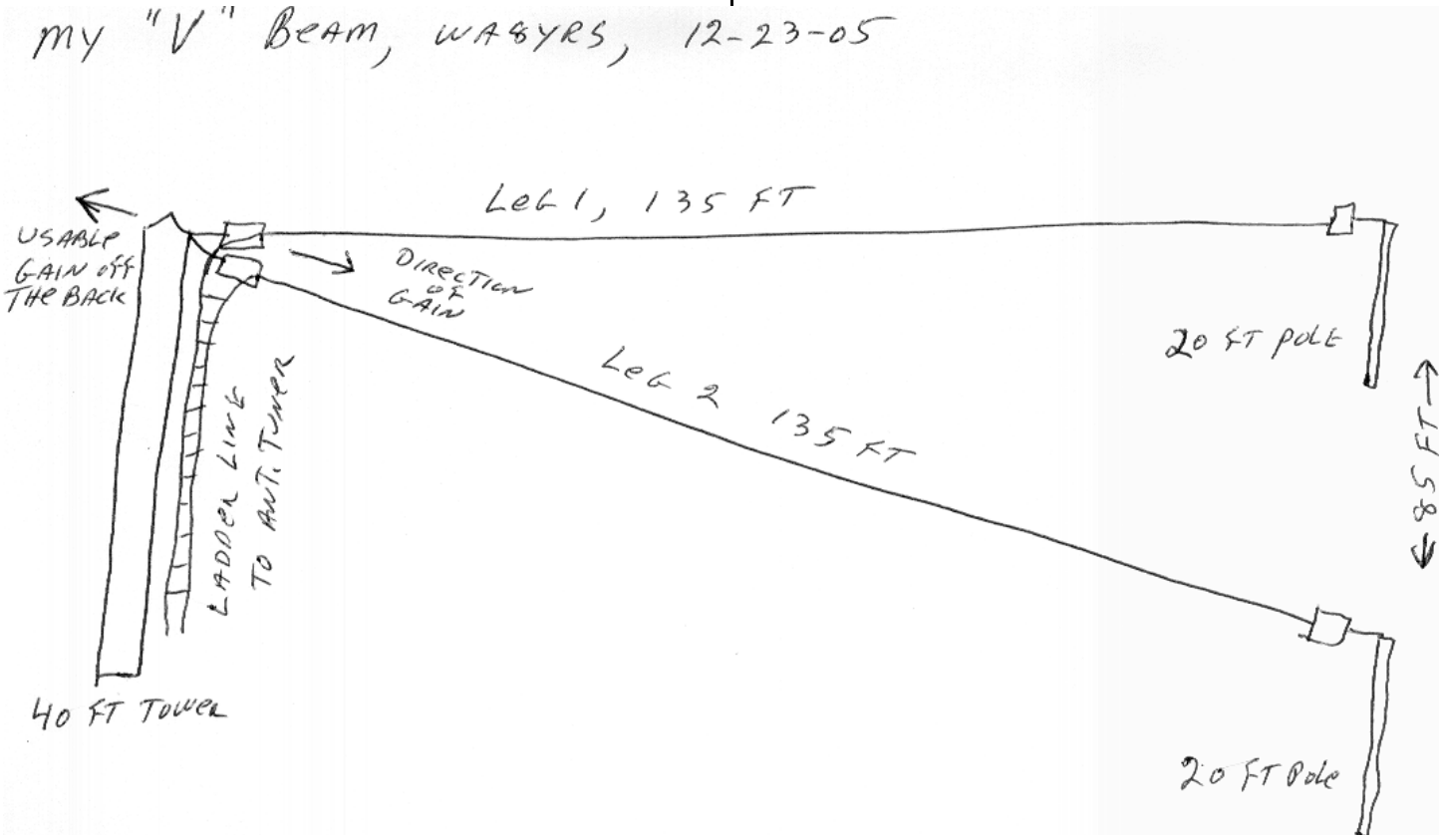
While designing a "V" beam, keep in mind that the "V" beam is not omni directional. Duh, that is why they call it a beam! The gain of the beam is through the center of the "V". See my drawing. Maximum gain would be right between the two end poles. So, to work Europe, you would need the beams "V" to be pointing North East. The beam has very little front to back ratio, so by placing the beam in this direction, you should also have a good signal to the South West. Alternately, if the only direction you can orientate the beam is South West, you will still have gain to the North East. A "V" beams pattern is pretty narrow too. I believe that having the beam closer to the ground will broaden the pattern somewhat, so you may cover a wider area than what the ARRL book says that you will. This comes at the expense of reduced gain. If one needs more directions, it would be a simple matter to run more legs, each 85 feet apart and put a relay at the feed point to determine which legs are in use at any one time. That would be an interesting project! Another way to get a wider pattern would be to make the end poles either farther apart or closer together. Not sure which way this should go and I could not find anything in the Antenna book about it.

How do you feed a "V" beam? The most common way is with 600 ohm open line into an antenna tuner. You can run the open line right into the shack or place a 4:1 balun at the base of your tower/pole/whatever, then feed it into the shack with a very short piece of large coax (RG-8 or better). By very short, I mean less than 15 or 20 feet.

Tune your antenna tuner for 1 to 1 SWR and you are off to the races. If you only want to operate on one of the three bands, you can always design a matching network right at the antenna feed. Then you can run coax the entire length. I like the multi band option though.

Notice that I have not stated any gain figures. This is because I have not designed the ideal "V" beam here. The ARRL Antenna book quotes gains comparable to a 4 element yagi with their two wavelength beam up 67 feet on all ends. I can say that this lower antenna will work much better than a dipole in its favored direction and it is a heck of a lot cheaper than installing a huge yagi antenna. Another plus would be that 80 and 40 meter operation is feasible if the antenna legs are around 135 feet long. In fact, you may have some gain on 40 meters.

How much is this going to cost? Well, the wire may run as high as $30 or so. The rest depends on what you have available. Figure $25 per 20 foot pole and $50 for a 40 foot pole. For the feed pole, I would look for a used TV tower of about 30 feet or so and add a 10 foot pole to the top. A 20 foot tower with a 10 foot pole would be 30 feet, which should be good enough. You can also go as low as 10 feet at the ends. I would say the entire project should costs less than $150 even if you bought everything new. But you are not going to do that, are you? Compare that to over $1000 for a tower and yagi beam antenna. When I installed my self supporting tower and 3 element tri-bander, I believe I spent right around $1500 for everything.



I did experiment with this antenna a few years back. It was basically what I have described here, except I believe that the end poles were only 10 feet high. I remember trying a contest with it. I had no problems working everyone I could hear. This may make a decent Field Day antenna. See you next month.

KIDS DAY, JANUARY 8 - A CHANCE TO PROMOTE AMATEUR RADIO

We hams keep saying we need to get new, younger blood into our great service. The question is: What are we doing to make this happen?

"The second Sunday in January is the day to turn your shack over to the kids for some ham radio fun with a purpose. The first running of Kids Day 2006 begins Sunday, January 8, at 1800 UTC and continues until 2400 UTC with no limit on operating time (the second Kids Day will be Saturday, June 17). Kids Day provides a terrific opportunity to show youngsters what Amateur Radio is all about--and that includes its role in emergency communication. ARRL Education and Technology Program ("The Big Project") Coordinator Mark Spencer, WA8SME, says Kids Day can be a great opportunity spark change and get kids and families thinking about emergency preparedness." From the ARRL Letter, December 23, 2005.

The two Kids Days each year are great ways to introduce youngsters and not so youngsters to Amateur Radio. What will you do to get non-licensed people to participate in Kids Day? What can you do?

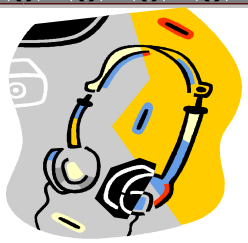
Check out http://www.arrl.org/arrlletter/audio/ for an audio report or http://www.arrl.org/arrlletter/05/1223/ to read the story.

Experience with the ARRL Big Project school program clearly demonstrates that many youngsters become interested in Amateur Radio and become licensed once they have tasted hamming. Please do your part to introduce young people to Amateur Radio. Looking ahead, Kids' Day number two is June 18.

Decembers meeting from left to right: Steve Dick, KC8YED; Bob McBride, N8QPM; Don Russell, WA8YRS; Don Bunner, KB8QPO; Ruben Clark, KB2SAI; Mike McCardel, KC8YLD; and Jeff Butz, N8SMT. Barry Butz, N8PPF, took the picture. Maybe you can spot him in the windows?

JANUARY MEETING IS SHOW-AND-TELL NIGHT

By Barry Butz, N8PPF

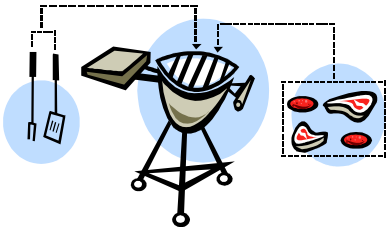


Did you get a new goodie from Santa? Do you have an old favorite toy you'd like to share? How about something you have built? Bring it with you to the January meeting.

It will be audience participation at Show-and-Tell night. Everyone should bring something along to tell about. It doesn't have to be a major appliance, just anything you find interesting and can talk about for a couple minutes. You can tell what it is, where it came from, how it is used. It doesn't even have to be radio related, just something you like. Metal, paper, wood - bring it with you.

We really want everyone to participate. This can be a really nice activity.

Club Dinner at Ryan's



February 13, 2006 at 6:00 P.M.
All Local Hams Are Invited

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 Schedule:
$20 regular
$10 for second member in the same family
$10 for over 65 yrs. of age
$15 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:

The Mt. Vernon Amateur Radio Newsletter, CQ, is published monthly by the Mt. Vernon Amateur Radio Club.

Editor: Don Russell, WA8YRS

President: Ruben Clarke, KB2SAI
Vice President: Don Russell, WA8YRS
Secretary: Jeff Butz, N8SMT
Treasurer: Bob Bruff, N8PCE

Credits: Clip Art and Cartoons thanks to http://wm8c1.50megs.com/radio_clip_art.htm, http://www.qsl.net/k4adl/, http://pages.prodigy.net/kg0zz/clipart/ham_art3.htm, http://www.arrl.org/,

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.

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.