



Ham Radio Rocks!

The Mt. Vernon Amateur Radio Club November, 2012 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**



AFFILIATED CLUB NEWS



By Mike McCardel, KC8YLD

As I mentioned in last month's article, I am at PACIFICON 2012, or rather waiting for my air flight home after PACIFICON 2012 at San Jose Airport. I came here wearing my AMSAT hat but sometimes the lines between ARRL and AMSAT are blurred. This is especially true when dealing with an ARISS contact like we did this past weekend. What an adventure this has been!

It all began last November just near here at the AMSAT Symposium at San Jose. AMSAT is trying to expand its educational involvement because available launches for Orbital Satellites Carrying Amateur Radio are more reliant on an educational objective. AMSAT is trying to build cubesats with the avionics using Amateur Radio to aid in collecting research data and be used by hams for communication. But the educational mission reaches further than just getting birds in space. The very future of our hobby may depend on capturing the imagination of today's youth and harnessing it into new ideas and paradigms of engineering.

The next meeting of the Mt. Vernon Amateur Radio Club will be Monday, November 12 at 7:00 P.M. in the Red Cross Annex Building, 300 North Mulberry Street, 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 Saturday November 10, 2012 at 9:00 AM at Allison's Finer Diner, 11587 Upper Gilchrist Road, Mt. Vernon, Ohio*****

By motivating youth and demonstrating how Amateur Radio is fun, challenging and relates to them we are building the future of, not only our hobby, but maybe the future of our country. The ARISS contact serves this purpose well. It's a "WOW!" moment but the whole event was also built around other activities that stressed education, especial in Science, Technology, Engineering and Math (STEM), in a fun way.

I spent a good bit of time over the weekend working with the folks in the PACIFICON Youth Lounge teaching activities and explaining how they meet core curricular goals and standards in the classroom. I also worked directly with some of the youth in attendance building cubesat models, plotting satellite fly over tracks and interpreting data gather from our cubesat simulator. The kids seemed to really enjoy it and I had a blast. Pacificon is sponsored by the Mt. Diablo ARC. The event doesn't come near the scope or breadth of Dayton's Hamvention but it is a big venue. To pull off the ARISS contact and the other educational activities it took a lot of cooperation with and effort by the club and other clubs in the area.

I mention this because cooperation and effort is the key. Everywhere I speak I am asked about recruiting youth. Wow moments are good. Doing demos for schools, scouts, church groups, operating in public spaces give us opportunities that WOW. But the problem with WOW moments is they are just that, moments. You have to work at keeping, directing and guiding a child's attention. It's what we do AFTER we wow that really count. Think about conducting a ham class, especially the ones where it's all done in one day and they get a license. It's what follows that will determine how good a ham will become and how long their new interest will last. Most clubs in Ohio recognize that and follow up with new hams to get them started and get them involved. We need to do the same thing with kids. Doing a killer demo? Are you ready to come back and help them get a license rather than hoping to see if they come to you? You should. Also, areyou spending good quality day to day time with your kids, grand kids, nieces and nephews letting them into your hobby? Have you put them on your knee and let them talk? Let them play with your key while your teach them to spell their name in code? Have you built a kit and actually let them do the soldering? Folks, WE are our kids WOW person. Milk it for all its worth. They get extra time and attention from you. You are helping to build a better future for them by helping them understand Science Technology Engineering and

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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.

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Math. You help put our country back on the winning path of invention, discovery and innovation. You will also make our hobby stronger and more vibrantly relative to a whole new generation. Most of all you will be wowed by them!

What is my challenge to clubs this month? Help your club plan a wow moment for a local youth group or school and take the extra step of following up with an opportunity to work with them to get a license. Remember not everyone will be interested but if you don't follow-up none will get involved.

We really can change the world, one diaper at a time.

Remember, Get out of meeting mode.

73,
E.Mike McCardel, KC8YLD
Ohio Section Affiliated Club Coordinator
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Treasurer's Report

Nov 2, 2012
for Aug 1 to Oct 31, 2012

<u>Balance on 7-31-12:</u>	\$ 2698.56
<u>Income:</u>	
Dues:	\$ 32.00
50-50:	\$
Interest:	\$ 1.88
Donations:	\$
<u>Expenses:</u>	
Post Office Box Rent:	\$ 58.00
<u>Balance on 10-31-12:</u>	\$ 2674.44
<u>Designated Funds:</u>	
Year 2005 Repeater Fund:	\$ 536.39
Field Day Fund:	\$ 0.00
Communication Vehicle Fund:	\$ 471.04

Barry Butz N8PPF

TECHNICAL TIDBITS

Tricks, Tips, and Slips

by Barry Butz N8PPF

Are you tired of getting the same old boring weather information on the internet or TV? Then check this out.

While repairing an old portable receiver that covers VHF frequencies, I discovered station WXP4, the aviation weather broadcast from the Knox County airport on 126.05 MHz. It is a continuous loop giving current conditions for pilots - wind speed and direction, visibility, ceiling, temperature, dewpoint, and altimeter setting (same as barometer). The station has 2.5 watts output with AM modulation. It's not especially exciting, but interesting nonetheless.

25, 50, and 75 Years Ago in QST (October 2012)



By Dan Romanchik, KB6NU

QST publishes a column every month towards the back of the magazine that highlights from issues 25, 50, and 75 years ago. Now that the QST archive is online, it's really worth taking a look at these articles. Here are a few that caught my eye in October:

October 1937

- Modernizing the Simple Regenerative Receiver (http://p1k.arrl.org/pubs_archive/19076) by Vernon Chambers, W1JEQ. This a nicely-designed and built regen using two tubes, a 6K5 pentode and 6C5 triode. I'm going to keep this design in mind if I ever get around to playing with all the tubes I have. As an aside, I searched

on W1JEQ's callsign and found out that he wrote 87 articles for QST from 1936 through February 1958. This was his third article.

- Concentrated Directional Antennas for Transmission and Reception (http://p1k.arrl.org/pubs_archive/19078) by John L. Reinartz, W1QP, and Burton T. Simpson, W8CPC. This article describes two different antennas. The first is a half-wave loop antenna that the author says works on 2-1/2, 5, 10, and 20m. The second is a square loop antenna called a "signal squirter" for 14 Mc.

October 1962

- In *****"New Apparatus"***** (http://p1k.arrl.org/pubs_archive/46246) on page 27, a key made by J. A. Hills, W8FYO, of Dayton, OH is shown under the heading, "New Key Mechanism for Electronic Keyers." The photo clearly shows a key whose design was adopted by Bencher for the BY-1 paddle.
- The *****Towering Problem"***** (http://p1k.arrl.org/pubs_archive/46122) by Jay Kay Klein, WA2LLI clearly shows that putting up towers have always been a problem for amateur radio operators. This is a humorous take on the problem. What's notable is that this type of humorous article almost never appears in QST anymore. Amateur radio seems to have lost its sense of humor, or at least its cadre of humorous writers.

October 1987

- Stalking Those Fugitive Components (http://p1k.arrl.org/pubs_archive/81357) by Doug DeMaw, W1FB. Today, we often complain about the demise of local parts suppliers, but this article shows that this was a problem 25 years ago as well. W1FB gives some advice that I gave not long ago on my blog. That is, stock up on parts, especially when you find a good deal on them, and you won't have to scrounge around for them when you want them.

Digitizing all of the back issues of QST and putting them online is one of the things that the ARRL has done right. This is a wonderful resource for members. If you have a favorite QST article I'd love to hear about it. Please send me the title and the month it was published. My e-mail address is cwgeek@kb6nu.com.

Thanks & 73.

When not perusing old issues of QST, Dan is the station manager for WA2HOM, the amateur radio station at Ann Arbor's Hands-On Museum. He also writes amateur radio license study guides. In fact, by the time you read this, the No-Nonsense Extra Class Study Guide should be available on Amazon. Just search for "KB6NU."

Radio Activity



By Don Russell, W8PEN

Awhile back a friend from work gave me an old desktop computer. It was a Pentium 4 with 4 gig of ram. Had a DVD read/write drive and about 1/2 gig of disk storage. It also had a TV tuner installed. I thought that was pretty good considering that it appeared to be at least 10 years old.

My friend said he had installed a different drive on it but never gotten around to installing windows on it. He did however, have the installation disk for that particular computer, which he gave me.

With some anticipation, I installed the software. All went smoothly until I had to enter the windows authenticity code to finish the install. The code I had did not work. I then tried the code on the label in back of the computer. No go. After several attempts just in case I typed the code in wrong, I gave up on it. Oh well, it was free. There it has sat for most of this year.

In the back of my mind I still had plans for this computer. I had always wanted to try the Linux operating system but never had a free computer to do so. I felt that one day this may be the perfect computer to practice on. I actually did try to install Linux on one of my computers once. I used an Ubuntu Linux "live" disk just to see what it was all about. Things loaded okay, but I never could get the wireless card on the computer to work and finally gave up on it.

I read in QST a few months back the Ubuntu has

really improved their Linux install, so I decided to try again on this older computer. The latest install is Ubuntu 12.10 and was supposed to be competitive with Windows 7. Oh yes, and it is free software. Here is the homepage of Ubuntu. You can find the download page from here. It explains more fully what Ubuntu 12.10 is and how to download it:

<http://www.ubuntu.com/>

The download is large. It is an ISO DVD image of the install disk. You do the download and then burn the ISO image to a DVD. Fairly simple process actually. They do give detailed instructions on how to do this and windows software supports burning CD and DVD disks.

The install was fairly easy and I soon had Linux operation on the older computer. This is where the problems began. Being an older computer it would not run the Ubuntu 12.10 version at an acceptable speed. Much delay between clicking on folders and getting results. Even web surfing was a bit too slow. I felt that the problem was a reasonable one. After all, 12.10 is supposed to be competitive with Windows 7. Obviously it may not run very well on really old computers.

Not a problem. I figured I could find one of the earlier programs and try again. So back to the web surfing for a different install. Found it, but not exactly what I was thinking.

Instead of an older install, I found a stripped down version of Ubuntu 12.10 which was supposed to run on "most" computers. Users claimed this was the version of choice if you had an older computer in which to run Linux on. This one was called Xubuntu 12.10 and was the latest version. Programmed by a branch of the original Ubuntu programmers just for people like me wanting to try Linux on an older computer.

Here is the home page for Xubuntu:

<http://xubuntu.org/>

Once again, the download is an ISO image file. This one is a smaller file size and you can burn it on either a CD or DVD. If your old computer does not have a DVD drive, then the obvious choice would be to burn the image to a CD.

It took about 25 minutes to install this version. When rebooting the old computer I was awarded with the Graphical Interface Version of Xubuntu 12.10. It

looks much like windows, although the feel is different. On my system I do not think the sound card is working. I will have to check that out. Since I was not able to install windows completely, I am not sure if the sound card is working or Xubuntu did not have the proper drivers. I was able to surf the web with the Linux version of "Firefox" web browser, but so far that is as far as I have gotten (had to stop playing and do the Newsletter). As far as software is concerned, Xubuntu does have an interesting feature as does the original Ubuntu. One can access lots of software right from the desktop, most of it freeware. Just click on the software store and you are in business.

Unlike windows, Ubuntu and Xubuntu claim that one does not need to run antivirus software. I am not sure if that is because the program is so secure, or if people do not bother trying to infect Ubuntu systems because there are so few users. Maybe a little of both.

If you have an old computer taking up space you may want to try one of these operating systems on it just to see what you are missing. Free operating system plus free upgrades. What more can one ask for. As installed, both programs come with a Word Processor, Spreadsheet, and Power Point programs plus access to many more. From what I understand, there are lots of ham radio programs available too.

Give it a try and then come to the meeting and let me know how you like it.

ARISS Contact



By Mike McCardel, KC8YLD

I recently had a radio adventure of a lifetime. As some of you know I traveled to Santa Clara to

represent AMSAT's Educational Outreach at PACIFICON 2012 and the ARRL National Convention. Then two weeks later I ventured onto Orlando where I opened the 30th AMSAT Space Conference with my presentation AMSAT @ PACIFICON 2012 and AMSAT's Educational Outreach.



This adventure began a year ago but I want to concentrate on the events as they unfolded at PACIFICON which was also the ARRL National Convention this year.

It takes a village to put on an ARISS contact. And, as mentioned, we had been working on this for a year. As the date drew closer all the activity seemed to compress. We found out Astronaut Lee Morin would be present at PACIFICON and would be available to witness the contact and to talk to the kids afterwards. We learned our primary ISS contact would be Aki Hoshide KE5DNI and the secondary contact Suni Williams KD5PLB. We made our contact with Aki. We now knew we were going to telebridge so we had to work out a system using the hotels PA system. Last minute paper work in the release forms, press releases, and the 24 hour "we're ready" email to NASA confirming contact frequency and that our systems were in place.

Just as Joe was answering the last question on the 24 email notice his computer rebooted because of a Microsoft update and it didn't send. We were within minutes of making this deadline and possibly the contact. Fortunately Joe had forwarded all the correspondence to me and I was able to pull up the email template and complete it on my iPhone.

The next morning the Sedona room at PACIFICON was very active. We were demonstrating our

ground station to the students, Mark and AMSAT President Barry Baines WD4ASW gave forum presentations. We had our run through with the kids, did sound checks etc. I had two simple tasks. Make sure the kids had their questions and were lined up and ready to go. Make a conference call to Australia and Italy for the telebridge. Tony Hutchison VK5ZAI from Australia was our telebridge moderator and Claudio Ariotti IK1SLD from Italy was our Control Station as the ISS would pass over Europe.

I had the kids all lined up in seats, in order and ready to go. At 25 minutes before the scheduled contact I moved to the back of the room to the PA set-up picked up the white '80s era phone with the touch pad in the receiver and made my call. I soon heard Tony and Claudio chatting and announced myself, "This is PACIFICON, EMike KC8YLD here." Tony introduced himself and so did Claudio. It was then I noticed that 1. Nothing was coming over the PA and Tony and Claudio could only hear me not the mic we were using for the contact. 2. This was not the phone we used in the dress rehearsal. My heart sank. A couple of our support team jumped in and began playing with the system. In a bit of a panic I suggested we not touch anything until the hotel tech arrived, although he was supposed to be right there. We're now 15 minutes from contact and the tech showed, much relief. Then the Tech says, "Hang-up" three of my team say all at once "NO!" the tech looks at me. I said "It's your system I have to trust you but we can not lose this call." He answered, "Go ahead and hang up." With my heart in my throat I did as he said and suddenly, to everyone's relief, Tony's voice came in over the PA. The first phone was set up to call and everything was connected. The hotel tech was worried, rightfully so, about potential feed back and switched to another phone and a switch that activated as we hung up the receiver. He had just forgotten to tell anyone else.

Tony went into his spiel as moderator. He then turned to it back over to the venue where the PACIFICON ARISS contact, and AMSAT EDU team member Joe Spier had a chance to introduce himself say something about PACIFICON bring everyone's attention to the tracking software being displayed on two huge screens in the room. Everyone began to anxiously watch as the ISS projected footprint approached Italy from the Southeast. "Back to you Tony." Claudio then introduced Tony who described his station and what his part in the contact would entail and reminded the students to say "over" after their question. Then right on queue Claudio announced

"I am going to call the International Space Station now." "OR4ISS this is IK1SLD for our scheduled student contact." STATIC Joe K6WAO the local ARISS contact frowned but looked confident. OR4ISS this is IK1SLD for our scheduled student contact." More STATIC. Joe looks less confident. Odd to see this battle tested veteran look a little shaken. Again, OR4ISS this is IK1SLD for our scheduled student contact do you Copy?" "IK1SLD this is OR4ISS, Aki I hear you loud and clear, Welcome aboard the International Space Station." Everyone is smiling.

Back at my post I have the kids lined up. Mary the first in line is on her spot. Joe: "This is Joe K6WAO, Welcome to PACIFICON. Our first question is from Mary." Mary, age 9: "Hi I am Mary, What is the space weather forecast for the ISS today? – OVER" All sixteen student were able to ask their questions and get answers:

Mary (9) : What is the space weather forecast for the ISS today?

Emily (19) : How come there is not a section of the ISS that spins and provides artificial gravity to help the astronauts stay healthy, and have a somewhat normal existence – like in the movies?

Katie (12) : How can amateur radio be improved on the ISS?

Devin (11) : How do you sleep in space? Do you have beds?

Maxton (8) : Do you ever get to talk to your family from space? If so, how?"

Olivia (9) : Can you see Venus, Mars, Jupiter or Saturn from where you are in space?

Noah (5) : How do you get from the space shuttle into the Space Station, and how do you get from the Space Station into the space shuttle?

Annika (10) : Of all your everyday things to do at home, what is the hardest to do in space?

Andres (11) : How does the lack of gravity effect

your muscular structure in space?

Cameron : How did your face handle take off? Did it flap in the wind?

Niccolo (8) : What is the most memorable view of Earth you have seen from space?

Aliya (9) : How long can someone live on the space station?

Emily (12) : How is being in space different than you thought it would be?

Ben (8) : What are the 3 most important things for someone to do or learn before they apply to be an astronaut?

Liam (6) : How far away are you and how long will it take you to get back home?

Eli (5) : Can you and do you eat ice cream in outer space?



Ben was dressed in an astronaut flight suit and receive a lot of attention by the press after the event. Katie, a ham, immediately made her way to our ground station to make a contact with FO-29. At 12 she is really into making satellite contacts.

We even had time for visiting astronaut Lee Morin to say hi to his friend Aki Hoshide.



In addition to the contact I was involved with AMSAT and ARRL at the Youth Lounge in the center of the exhibition hall. I also had an opportunity to work with Mark Spencer WA8SME ARRL Education & Technology Program Director and Nathan McCray K9CPO ARRL Instruction and Resource Coordinator. AMSAT also sponsored a portable satellite ground station in addition to the ground demo we set-up for the contact. Tom Deeble KA6SIP who was given permission to operate as W1AW/6. I need to also thank Dale Hunzeker KJ6VUC who ably assisted me with my responsibilities with the youth lounge and STEM development.

What an experience!

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: