

The Feedline

VOLUME 13

ISSUE 4

APRIL 2013

A NEW AGE DAWNS

BREAKFAST AT THE BLUE FIG

If you missed our last breakfast on the 13th we both missed out. Check out these photos and mark your calendar for May 11th. Check our new website for details. We hope to see you there!



Great food and a great time was had by all. What else do you expect when you mix Hams and Eggs?

TRANSMIT AUDIO SETUP

At our next monthly membership meeting on April 17th, Bill Hannon N8PW will deliver a discussion on setting up the audio transmit quality on your HF rig.

It can be hard to set your Xmit settings when you cannot hear yourself on the air it can be hard to tell when you have splatter or modulation problems. Bill will work us through these issues. It should be an informative and interesting presentation. See you there!

VHF SIMPLEX QSO PARTY

The Alliance ARC sponsored a fabulous QSO Party on the 6th. After battling equipment problems and rather large pile-ups on certain townships we believe we did well. The results will be out next month. We can't wait!



FEEDLINE DEADLINE

This is the first edition of the new format for The Feedline. The Board hopes you like it. We need you your comments and suggestions to improve the newsletter. Please email your comments and suggestions along with any articles, photo's or submissions to Ted Armstrong at k8twa@live.com or give him a call at 330-495-0732.

The *new* deadline for submissions to the new newsletter is 7 days before the last day of the month.



By the way, you can use a straight email text or a Word doc to send your articles. We will edit them as needed.

Your new newsletter will be in your mailbox by the end of the first week of the month. We hope you love it!

Do not forget to tell us how we can improve the newsletter. We want it to be the best it can be.

AREA NETS AND SUCH

SUNDAY

Massillon Radio Net CW 7:30 PM 3599.5 LSB
8:30 PM During EDT
7:30 PM During EST

MONDAY

Cuyahoga Falls Amateur Radio Club FM 8:30 PM 147.270

TUESDAY

Stark County ARES Net FM 7:00 PM 147.120
(Last Tuesday of the Month for the Homeland Security Net)
Homeland Security Net FM 8:00 PM 147.51
(Simplex)

Massillon Radio Net CW 7:30 PM 3599.5
8:30 PM During EDT
7:30 PM During EST

WEDNESDAY

THURSDAY

Goodyear Amateur Radio Club FM 7:30 PM 146.985
Alliance ARC Nets CW 8:00 PM on 28.400
SSB 8:30 PM on 28.400
FM 9:00 PM on 145.370
Lake Erie Amateur Radio Association FM 8:00 PM 146.760
Portage County Amateur Radio Service FM 8:00 PM 146.895
West Stark Info Net FM 8:00 PM 147.180
Wooster Amateur Radio DX Group FM 8:00 PM 147.345
(PL=110.9)
Massillon Radio Net CW 7:30 PM 3599.5
8:30 PM During EDT
7:30 PM During EST

FRIDAY

(Except for the first Friday of the month.)
West Stark County Info Net FM 8:00 PM 147.180

SATURDAY

Would you like to see a net added to this list?

Email us at: webmaster@w8al.org



FLORIDA HAM FINED \$25,000

On March 1st 2013, the FCC issued a Notice of Apparent Liability for Forfeiture (NAL) in the amount of \$25,000 to Terry L. VanVolkenburg, KC5RF, of Cocoa, Florida. The FCC alleged that VanVolkenburg “.... willfully and repeatedly violated Sections 301 and 333 of the Communications Act of 1934, as amended..., by operating a radio transmitter without a license on...465.300 MHz and for interfering with licensed communications.” VanVolkenburg holds an Advanced class license.

In September 2012, FCC agents of the Tampa Office received a complaint of radio interference from the Brevard County Sheriff’s Department. The Sheriff’s Department uses a wireless radio communications system in the county jail located in Sharpes, Florida. The Sheriff’s Dep’t. experienced intermittent interference to its radio communications in the jail on the frequency 456.300 MHz on at least 14 days between September and October 2012. According to the NAL, audio recordings taken by the Sheriff’s Department suggest “that a male individual interfered with the prison’s communications by transmitting vulgar language, sound effects, previously recorded prison communications and threats to prison officials over the prison’s communications system.”

On October 28, FCC agents DF’d (You just knew they would use direction finding gear.) the source of the interfering radio frequency transmissions to a residence in Cocoa, Florida.

The frequency 465.300 MHz is allocated to public safety stations; as an Advanced class licensee, VanVolkenburg does not hold privileges to operate in this portion of the spectrum. In addition, the FCC’s records showed that no authorization was issued to anyone to operate a private land mobile station at this location. (AN OVERSIGHT I AM SURE.)

“Approximately two hours after locating the source of the transmissions, agents from the Tampa FCC Office inspected the radio stations in Mr VanVolkenburg’s residence,” the FCC noted. “The agents recognized Mr VanVolkenburg’s voice as the one interfering with the prison’s communications system. Mr VanVolkenburg initially showed the agents an Amateur Radio [that was] incapable of transmitting on 465.300 MHz, but eventually produced an Alinco DJ-C5 portable radio transceiver that could operate on 465.300 MHz.” (THAT WAS NOT SMART.)

According to the NAL, VanVolkenburg “did not specifically admit that he had interfered with the prison’s communications system, but when asked about the transmissions on 465.300 MHz and the interference to the prison’s communications systems, he stated that he chose 465.300 MHz because the prison’s transmissions on that frequency were strong; that he was only using 300 mW and did not think that he ‘could talk over anyone and therefore wasn’t interfering with anyone’; and that the interference would not happen again.” (CAN YOU SAY, TOO LITTLE TOO LATE?)

Although VanVolkenburg holds an Amateur Radio license, it does not authorize him to routinely operate on public safety frequencies. “Part 15 of the Commission’s rules sets out the conditions and technical requirements under which certain radio transmission devices may be used without a license,” the FCC explained in the NAL. “In relevant part, Section 15.209 of the rules provides that non-licensed transmissions in the 216-960 MHz band is permitted only if the field strength of the transmission does not exceed 200 µV/m at 3 meters. The agents observed the transmissions on 465.300 MHz at a distance of approximately **2 miles** from VanVolkenburg’s residence. Given the distance from the source, the agents determined that the transmissions’ field strength exceeded allowable Part 15 levels.”

Section 503(b) of the Communications Act provides that “any person who willfully or repeatedly fails to comply substantially with the terms and conditions of any license, or willfully or repeatedly fails to comply with any of the provisions of the Act or of any rule, regulation, or order issued by the Commission thereunder, shall be liable for a forfeiture penalty.”

Article continues on Page 11



NUGGETS FOR NEWBIES

I am often asked by new ham operators if they can use their radio on a Public Service frequency.

The short answer is Yes and No. So much for a clear answer. You need to read a bit more to understand what you can and cannot do and WHEN you can and cannot do it.

First read this:

§ 97.111 Authorized transmissions.

(a) An amateur station may transmit the following types of two-way communications: [...]

(3) Transmissions necessary to exchange messages with a station in *another* FCC-

regulated service while providing emergency communications;

In a declared emergency, while providing emergency communication, you can communicate with any user of any FCC regulated service if need be.

Then there's this tidbit, which basically authorizes the use of ANY frequency in ANY service band when help is needed in an emergency:

§ 97.403 Safety of life and protection of property. No provision of these rules prevents the use by an amateur station of any means of radio-communication at its disposal to provide essential communi-

cation needs in connection with the immediate safety of human life and immediate protection of property when normal communication systems are not available.

It is legal to talk to anyone you need to in order to get assistance when "normal communication systems are not available" - so when your cell phone doesn't work and you can't get to a wire-line telephone, etc.

Andrew (K9LDT)

<http://www.arrl.org/files/file/Regulatory/Part%2097%20-%202004-28-2011.pdf>



MONTANA HAMS WIN BIG (AND TALL)!

Hams in Montana now have both antenna height limit and protection from distracted driving laws. The ARRL reports that on February 28th Governor Steve Bullock signed House Bill 148 into law to provide protections to the states ham radio community.

Montana State Representative Pat Connell, WA7PDC, had submitted the bill titled Clarifying Local Government Authority to Regulate Amateur Radio Operations to the 2013 Montana legislative docket.

The new law prohibits local governments from regulating licensed amateur radio operations from a motor vehicle. It also establishes a **100-foot height limit** below which local jurisdictions may not regulate ham radio towers and antennas.

Am I the only one that thinks we should find a legislator or two, or three, or more in our own state to submit a similarly worded bill? A 100 foot height limit before receiving grief from the local code enforcement Gestapo? WOW!

Perhaps I am overly optimistic, but let's TRY. (Yes, I know what Yoda says. I can think of two legislators that I will contact next week. How many can you think of? How many clubs and club members can we find that will write a letter in support of a similar bill in your state?

Why don't we work at making this democratic, republic work for us instead of against us for a change?

THERE MAY BE HOPE FOR HAM RADIO

The Fontana Herald reports that in this technologically advanced age of communication which features such as 21st century tools as Facebook and Skype, there remains plenty of interest in a method that is more than 100 years old - ham radio.

They say students at Dorothy Grant Elementary School in Fontana are among the more than 2 million people worldwide who are ham radio

enthusiasts. The local students have their own amateur radio club and have talked to people from many areas of the United States and other countries.

This endeavor is co-ordinated by Beverly Matheson (KJ6RSX), a fourth-grade (9-10 years old) teacher at Grant, along with David Collingham K3LP, a Fontana High School graduate who is based in

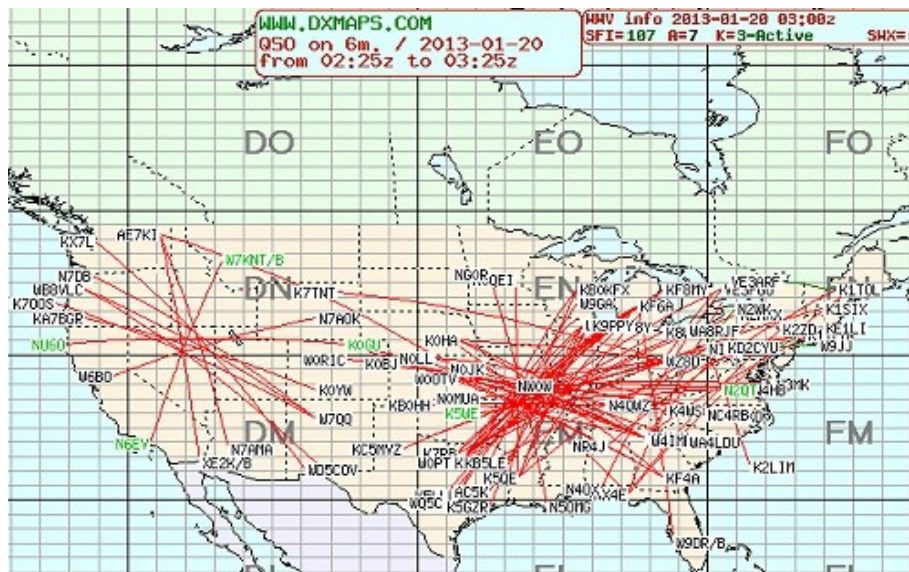
Maryland.

Read the full newspaper story at:
<http://www.fontanaheraldnews.com/articles/2013/03/07/news/doc51392d261099a144537747.txt>

What is really exciting here is these kids are in ELEMENTARY school. A great time to start a lifetime habit of learning.

DXMAPS NEEDS YOUR HELP AND YOUR \$

The [DXMaps website](http://www.dxmaps.com) run by Gabriel (EA6VQ) needs your support. This is the site that plots contacts spotted to the DX Cluster on a map, band by band, to show propagation in real-time. It is especially invaluable during the summer Sporadic-E season to track the rapidly-moving band openings.



The trouble with any web site is that if it becomes very popular the costs of running it grow beyond what most people can afford as a hobby. According to EA6VQ the cost of a new dedicated server for the site will be \$250 a month. So he is asking users to become "supporter users" by donating \$33 US per year. But any donation is welcome.

If you are an active DX operator, especially on six meters and up, you will know how invaluable DXMaps.com is. Hopefully hams will step up to the plate and [send Gabriel a donation](#).

WORLD AMATEUR RADIO DAY 2013



This year's theme for World Amateur Radio Day, April 18, is 'Amateur Radio: Entering Its Second Century of Disaster Communications. I bet some DX will also occur.

The International Amateur Radio Union (IARU) E-letter reports that each year the IARU Administrative Council selects a theme for World Amateur Radio Day (WARD) for the following year. WARD takes place each year on April 18. At the November, 2012 Administrative Council meeting the AC adopted the following proposal: "The theme 'Amateur Radio: Entering Its Second Century of Disaster Communications' was adopted for the next World Amateur Radio Day, April 18, 2013."

The selected theme for 2013 is an excellent opportunity for amateur radio emergency communications or disaster communications groups to take advantage of the WARD to highlight the role amateur radio plays in disaster communications and disaster response. IARU member-societies could arrange amateur radio demonstrations in public places such as parks or shopping areas. Prepared handouts could explain the benefits of amateur radio in times of emergency or disaster. A ham radio demonstration in public areas usually generates inquiries and questions from the public about amateur radio and it also provides a great opportunity to attract new ham radio operators. If you plan on such a demonstration, don't forget to include some young people from your society so that young people who happen by the demonstration can see that amateur radio activity can be enjoyed by people of all ages.

In 2013, April 18 is a weekday. However, that doesn't prevent the public activity from taking place on the weekend before or after April 18. The idea is to gain as much exposure and publicity for amateur radio as possible.

Emergency communications groups might also combine a public demonstration for WARD with a simulated emergency test (SET).

WARD also provides an opportunity for amateurs to give presentations about ham radio to such groups as civic organizations, charitable groups, etc. For example, Rotary Clubs and Lions Clubs are only two of many worldwide organizations who have weekly meetings and these organizations are always looking for interesting and informative programs to present to their membership. There are very few experienced hams who can't talk for 15 or 20 minutes about ham radio in a positive fashion. Don't make the talk too technical. Stress the fun aspects of ham radio and the opportunity to assist in times of disaster. Keep the presentation to about 20 minutes to allow time for questions.

The fact that World Amateur Radio Day only happens one day each year shouldn't prevent IARU member-societies from promoting ham radio all during the year of course. Some member-society officials have expressed concern about a decrease in the number of new amateurs entering ham radio in their country. Upon further examination and discussion, it turns out there are many activities that societies could be involved in to increase public exposure to amateur radio but many are not taking advantage of those opportunities. WARD provides an opportunity to get out and make the effort to show the public what ham radio is about.

IARU <http://www.iaru.org/>



ASK AN ELMER

I recently saw a really weird Morse code key with two vertical paddles. What is it that thing?

It is an Iambic key. When used in mode B, you create dits on the left and dahs on the right. For example, there are at least 3 ways you can key a C:

1. "Slap" style -- by shoving both keys left, both keys right, both left, both right
2. Simultaneous release - press right, squeeze the left, hold them until the second dit begins, release both at the same time
3. Staggered release - press right, squeeze the left, release the right after the second dah begins, release the left shortly afterward Of course there are minor variations possible, such as whether you release during the second dah, between the second dah and the second dit, etc. But when it comes to the release, you can operate non-squeeze, release simultaneously, or stagger the release.

You can reliably send the right number of dits and dahs in slap style and in staggered release. Many fans of iambic mode keying will consider the slap style to be wrong. It sounds weird and complicated but you can really fly sending Morse code with this type of key.

LOHAN HOOKS UP WITH U.K. RADIO HAM G7ALW



NO! Not that Lohan. The Register reports that the Low Orbit Helium Assisted Navigator (LOHAN) team will be working with radio amateur Paul Shackleton G7ALW.

The report by Lester Haines says Paul G7ALW will be working on the Vulture 2 spaceplane.

Laying out his electronics credentials, Paul said he "designed, built and sold the TRAXA radio beacons for several years, and there must be about 400 of them in circulation, from the USA to Oz".

When he's not earning a crust of bread, Paul splits his free time between "geo-caching, 4x4'ing in his Defender, trying to build a L3 rocket, Ham Radio (of course) and watching the occasional episode of The Big Bang Theory".

Read The Register newspaper story at:

http://www.theregister.co.uk/2013/03/15/lohan_rocketeer/

TRAXA 433.920 MHz radio beacons

<http://www.radiometrix.com/files/additional/Traxa-Rocketry-Case-Study-Feb-05.pdf>

LOHAN (NO! Not her!)

<http://www.theregister.co.uk/Wrap/lohan/>

Vulture 2 Spaceplane

http://www.theregister.co.uk/2013/01/31/vulture_2/



<http://www.arrl.org/shop/Kits/>

ARRL Order No. 0171 - \$25.00

Makes me want to
go out and buy an
Apple computer.

KIT BUILDING

Our newsletter last month had a number of suggestions for encouraging kit building. I recently built this 24 hour clock kit from the ARRL, which I keep on Universal Time for contact logging.

It was an easy build. Operates on AA battery or a wall wart. Display is highly visible and keeps reasonably accurate time.

By the way, UT time is always UT Time; there is no such thing as UT daylight savings time so be careful.

A few words about kit building. You have to have a few tools to accomplish this and sometimes those tools can cost more than the

first kit when you add them up but the investment will have then been made for future projects; the described tools can probably be mostly found on Amazon.

1) A fine tip soldering Iron with temperature control:

Something similar to Velleman VTSS5U Low-Cost Soldering Station.

2) Solder, fine Something similar to Kester .020 inches.

3) Flush cut pliers to remove excess wire and solder from joints. Something similar to Enkay 940-C 5" pliers... remember, you want small and a flush cut tool.

4) Magnifying glasses, lens or hand held devices. Parts are small and solder area's are often tiny. Something similar to a Jeweler's Lighted High Power Magnifier Visor-1.5X-10.5 power... there are

lots of options out there in various forms.

5) Optional: De-soldering tool for goofs.

Something similar to vacuum pump "Solder Sucker" tool.

6) Optional: Tool/device to grasp the board while soldering (there are never enough hands). Something similar to SE MZ101B helping hands or a PanaVise tool.

Ask around or email your club to find a kit building guru. They can offer lots of money and time saving advice and suggestions.

Kit building is both fun and satisfying. Good Luck

Tim Crawford
KE7TAC

THANKS MICROSOFT!

The ARRL IT staff has been notified that Microsoft is blocking e-mail to the more than 20,000 members who use the arrl.net e-mail forwarding service to forward e-mail to Microsoft domains (hotmail.com, msn.com, live.com and outlook.com).

In addition, the blockage is also affecting those members of the ARRL's field organization and other ARRL volunteers who use an arrl.org (an alias e-mail

address which has an address with an address within a Microsoft domain) email address.

According to ARRL IT Manager Michael Keane (K1MK), the IT staff is working to have these blocks lifted and e-mail delivery restored to normal operation ASAP.

Hey Microsoft, thank you SO MUCH for your wonderful technology THAT GETS IN OUR WAY!!!

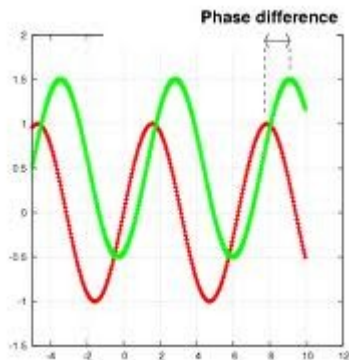


No, the above picture is not your intrepid newsletter editor. I just feel that way.

TIP OF THE MONTH - THE PLL

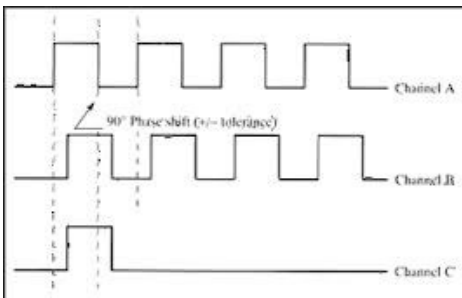
The Phase Locked Loop

Let's discuss phase first. What is phase? Phase is a term used to describe the position of one radio wave(magnetic or electrical) relative to another wave. Two identical waves are 'in-phase' when the crests and troughs of the waves meet and are 'out-of-phase' when the crest of one wave meets the trough of another wave. The illustration below shows two similar sine waves that are out of phase. That is, they have different starting and ending points even though they are the same duration.



Phase also comes into play in digital circuits where instead of waves, pulses are measured. In a pulse there is rise time, duration and jitter to consider. More on these at another time. Pulses can be out of phase or out of timing with one another just like waves can be out of phase or time with one another.

The illustration below shows three sets of pulses. Think of Channel A as the timing pulse and Channel B as an out of phase version of a similar pulse.



Last month we wrote about the VFO (Variable Frequency Oscillator) and that subject naturally led to the subject of the PLL. That is the topic of this month's article. I suspect the title may have provided a clue. A PLL is essentially a control system that provides an output signal whose phase is directly related to an input reference signal.

Article continues on the last page.

By the way, we run these articles to foster personal and professional growth in order to improve and enhance your organizations leadership.



COMMUNICATION TIP OF THE MONTH

Relationship Trajectory Relapses

We all face interpersonal problems in our life that are slow to resolve. We know how we want things to be and we have engaged in many conversations trying to get there ... yet the same problems keep coming back.

At some point we all start feeling discouraged and wanting to give up. My question to you is, how soon do you start to lose energy and want to quit? For some people, it is after one conversation. For others, their limit is three attempts before they throw up their hands in resignation.

This month I would like you to consider that perhaps you are expecting satisfaction much too soon. Instead of looking for success each and every time, consider viewing improvement as traveling along a trajectory which has its normal ups and downs. Lately I am trying to be much more realistic about how long it might take for someone to learn a new skill or for a work team to overcome years of mistrust. I look for gradual movement towards goal and am a bit skeptical of success and failure in the short-term.

For example, a work team might put on a "good act" for getting along when I am present when they haven't actually changed their dynamics. Will they relapse? You can count on it. Or, a relationship might be making steady progress and then have a relapse. That relapse might be just the humbling experience they need to compel them to keep trying. Time has a good way of letting you see whether there is true improvement going on or not.

Here are some tips on how you can begin to take a longer view around the communication issues in your life.

Be realistic in your time line. What can you realistically hope for this year?

Work on yourself, not others. As much as you would like the other person to go along with your plans, if they aren't ready — they aren't ready. When you take the long view, it is better to focus on keeping yourself on course and leading in a positive way.

If you are disappointed in what happened today with an individual or group, turn your attention away from being frustrated and onto what you will do next. I try to spend very little of my time feeling frustrated, and much more time on my next effort.

Continue to believe in people and their power to change ... everyone is capable of surprising us.

I hope you will see the benefit in this concept. Viewing communication problems as stretching out along a trajectory, has helped me feel more patient and able to continue focusing on positive efforts.

Plus, I have enough history behind me to recognize that some problems I have faced took years to resolve, that my greatest difficulties actually came about when I was pushing too hard and my greatest joys came about through loving patience.

Patti Lind www.pattilind.com

HAM FINED \$25,000, CONT'D

In addition, VanVolkenburg was found to be in violation of Sections 301 and 333 of the Communications Act, stating that “no person shall use or operate any apparatus for the transmission of energy or communications or signals by radio within the United States, except under and in accordance with the Act and with a license granted under the provisions of the Act.” Section 333 states that “[n]o person shall willfully or maliciously interfere with or cause interference to any radio communications of any station licensed or authorized by or under this Act or operated by the United States Government.”

“The totality of the evidence convinces us that it was Mr VanVolkenburg who was operating the unlicensed transmitter from his residence that was causing interference to the prison communications systems over at least a two-month period,” the FCC stated in the NAL. “Because Mr VanVolkenburg consciously operated the station and did so on more than one day, the apparent violations of the Communications Act were both willful and repeated.”

According to the Commission’s Forfeiture Policy Statement and Section 1.80 of the rules, the base forfeiture amount for operation without an instrument of authorization is \$10,000, and the base forfeiture amount for interference is \$7000. In assessing the monetary forfeiture amount, the FCC must also take into account statutory factors that include the nature, circumstances, extent and gravity of the violations, and with respect to the violator, the degree of culpability, any history of prior offenses, ability to pay and other such matters. “We find Mr VanVolkenburg’s misconduct particularly egregious because his unlicensed operation involved willful and malicious interference to the communications of the Brevard County Sheriff’s Department, which included threats against the officers, after being told (multiple times) to cease his interfering communications,” the FCC stated in the NAL. “Thus, we find that an upward adjustment of \$8000 to the combined base forfeiture of \$17,000 is warranted. Applying the Forfeiture Policy Statement, Section 1.80 of the rules and the statutory factors to the instant case, we conclude that Mr VanVolkenburg is apparently liable for a forfeiture in the amount of \$25,000.”

VanVolkenburg has until March 30, 2013 to pay the forfeiture in full, or file a written statement seeking its reduction or cancellation.

EX-HAM HAMMERED FOR \$10,000

On Feb. 25th, the FCC issued a NAL in the amount of \$10,000 to Jared A. Bruegman, ex-KC0IQN, of Bolivar, MO. The FCC stated Mr. Bruegman “apparently and willfully violated Section 301 of the Communications Act of 1934, as amended by operating an unlicensed radio transmitter on the frequency 14.312 MHz.” Bruegman’s license had expired in 2010. As a former Technician class licensee, he did not have privileges to operate in the phone portion of the 20 meter band when he did hold a valid Amateur Radio license.

In Dec. 2012, interference on 14.312 MHz was reported to the FCC’s office in Kansas City. Upon investigation, agents from that office heard a male voice transmitting on the frequency. Using DF gear, the agents located the source of the radio frequency transmissions to a transmitting antenna mounted on a pole adjacent to Bruegman’s residence. The agents determined that the signals exceeded the limits for operation under Part 15 of the Commission’s rules and therefore a license was required to transmit.

“Mr Bruegman was the only male in the residence during the inspection,” the NAL stated. “Mr Bruegman admitted to the agents that he owned the radio transmitter. The agents observed that the transmitter was turned on and tuned to 14.311 MHz. Mr Bruegman told the agents that he had no current Commission licenses, but that he previously held an Amateur Radio license, call sign KC0IQN. Mr Bruegman told the agents he would remove the microphone from his transmitter and only use it as a receiver.”

Bruegman has until March 27, 2013 to pay the forfeiture in full, or file a written statement seeking its reduction or cancellation.

SENDING PHOTO'S VIA HF

SENDING A PHOTO VIA HF PACTOR III/mobile

"51 minutes to send and 21 minutes to receive"

by Hal J. Denison, (WA7FIV)



I sent a photograph over HF radio today, using AIRMAIL, Wednesday, 13 March, 2013. This process was completed but brought up several issues and/or worries. The platform was my Tacoma 4x4 pickup. The message including the photo was addressed to Nate, KD7IBA via WL2K. The connection was on 40 meters to the Canadian RMS station: VA7RAH, the 98 Kb message included a 93 Kb photo.

The following equipment makes up the mobile station: Icom IC-7000, High Sierra screwdriver antenna and the PTCIIusb TNC (Terminal Node Controller) with a small laptop by ASUS. The **sending** connection lasted about **51 minutes**. This is the first problem. In the immediate aftermath of an event will we have enough time to send a photo of the event considering the turmoil everyone and everything will be in? Will the EOC have enough equipment to have a separate PTC II/III and time to copy a huge file that the photo is?



Article continues on Page 13

THE DAY OF THE YL'S - MAY 18/19

For the 3rd time in the world, 'The Day of the YLs' will be held on 18 and 19 May 2013.

This weekend is intended to gather on the air all amateur radio women around the world and, of course, all you OMs are invited to

participate, too.

A world wide meeting that you can not miss. Participate!

For more information, please go to:

<http://www.eurao.org/en/node/472>

Girls and DX. What a combination!



SENDING PHOTO'S VIA HF, CONT'D

The image on the previous page was the image sent via HF Pactor III, approximately 93 Kb.

This image was received via AIRMAIL, VHF Packet radio at 9600 baud. It took 21 minutes from beginning connection to connection end. As you can see there is enough clarity to see buildings and standing trees and water within the estuary. After an event the buildings may be damaged, the water may be up to the camera, the trees might be broken and down and the power poles might be down. All of these things might be seen with an image of this quality. With a photo this small the Officials will have a good enough image to see the destruction and circumstances and have a visual understanding of the event.

The image on the right was the original image. It was approximately 6 Mb.

The EOC with all the radio traffic, including: voice, written message, fire, police, County, State and federal, is a very busy place. The question remains, is there a better way to send and photos of the aftermath without taking the time of the very busy operators?

There may be: Send photos via person to person, via radio, or telnet if available. This could be outside the EOC but with closer contact than those in the field.



Nate, (KD7IBA), suggested this means of moving slower traffic like photos. We are both actually using these methods. The presumption is that there will not be cell phone or hard-line telephones. There may be Satellite internet for those who have it. If these folks have an RMS site on Satellite the problem is lessened.

This exercise is the first of its type in this area that I know of. The result was disturbing to me. We are accustomed to almost immediate e-mails and texting and sending photos with our cell phones. But what if the Internet is not available?

During the December storm of 2007 we learned how hard it can be to communicate.

Ham radio worked when all other means of communication did not. We need to continue to work on our skills to be ready for the big one. Are you ready?

A FOLLOW UP NOTE:

Nate, (KD7IBA), and myself transferred a 100Kb photo via HF Pactor III in 19 minutes by using ROBUST CONNECT in the Mode setting and Pactor 3 in Mode setting on 80 meters. All this was done in the AIRMAIL program. This then becomes a very fast mode to send photos from the field to the EOC for Official use. Telnet is the fastest mode but we are presuming the Internet will not be available.

OUR SEAS AND OUR SKIES



OF EXCELLENCE AT NOAA

OKLA HAM DEVELOPS APP FOR NOAA

The National Oceanic and Atmospheric Administration's (NOAA) National Severe Storms Laboratory (NSSL), in partnership with the University of Oklahoma (OU), has launched a free app -- mPING (mobile Precipitation Identification Near the Ground) -- with which users can anonymously report precipitation from their Apple or Android mobile device. Simply select the type of precipitation that is falling at your location and press Submit -- your location and the time of the observation are automatically included in the report.

"mPING gives the public a unique opportunity to act as citizen scientists, allowing them to report their observations of precipitation -- such as snow, rain, ice pellets or a mix -- in real time," said Principal Investigator Dr Kim Elmore, N5OP. Elmore, an ARRL Life Member, is a Research Meteorologist with the NOAA Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at OU.

According to NOAA, NSSL and OU researchers will use the mPING submissions to build a valuable database of tens of thousands of past and real-time observations from across the United States. Elmore said that because this nationwide information will be instantly available on the project's website, "we believe it will be useful for not only researchers, but a variety of groups, including students and teachers, forecasters, TV meteorologists, members of the transportation and aviation industries, city managers and law enforcement." Elmore told National Public Radio's All Things Considered that he estimates about 20,000 people have downloaded the mPING and nearly 60,000 reports have been submitted.

mPING is available at no charge on iTunes or Google Play for use on phones and tablets. Watch a short mPING "how to" video on YouTube. You can also listen to Elmore talk about mPING on National Public Radio's All Things Considered. --

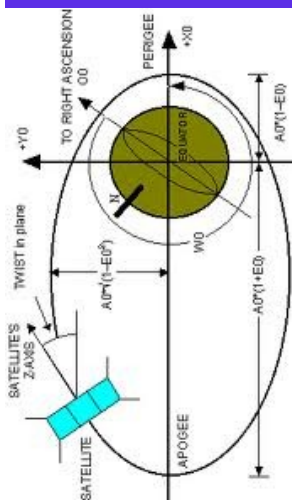
Thanks to NOAA and National Public Radio for the information



THE KEPS WILL KEEP ON COMING

Relax, the Keps will keep on coming. At least that is what AMSAT North America says after a deal was reached between the Amateur Radio Space Agency and the Air Force Space Command that will permit AMSAT to continue to re-distribute Keplerian elements from the latter's SpaceTrack service.

What is a Kep you ask? Keplerian elements. sometimes called by the acronym Keps are the basis for all satellite tracking. According to AMSAT's Orbital Data Manager Ray Hoad, (WA5QGD), the re-distribution agreement was approved on March 7 for the period April 1, 2013 to April 1, 2014.



THE DX CORNER

A group of hams who are working to restore Grey Point Fort will be operating a special event stations from 1700 UTC on May 31st to 1700 UTC on June 2nd. Grey Point Fort is a World War One Coastal Defense Fort located in Helens Bay, Northern Ireland. The special event operation will be using three yet to be announced special event call signs. More information will be posted on-line at tinyurl.com/greypoint-2013 or by e-mail to greypointfort (at) hotmail (dot) co (dot) uk.

Word has it that JQ2WTT and JE1XUZ who are KH0XH and KH0XW respectively will be active from Saipan, in the Northern Mariana Islands through April 1st. Both are university undergraduates. QSL via each operator's home call sign either direct or via the J-A Bureau.

An international team of seven operators are currently on the air from the Solomon Islands signing H44G. (My dad served there as a SeaBee during World War II. Very ugly business back then. I bet they do not have as many snipers nowadays.) Several stations will be operating simultaneously on various bands between 160 through 6 meters using CW and SSB, RTTY, PSK31 and SSTV. It all comes to an end on March 25th. QSLs go via DL7DF

GM3WOJ and GM4YXI will be active from Cocos Keeling Island from March 30th through April 13th using the new call sign of VK9CZ. They plan to be on SSB and CW, with some RTTY and hope to have a real-time logging system and daily Logbook of the World updates. More updates on this operation will be found on-line at www.vk9cz.com

A group of Italian operators along with members of the Association des Radio Amateurs Tunisiens and the Engineering University of Gabes are planning a DXpedition to Djerba Island using the call TS8TI between April 29th and May 6th. Operation will be on all HF bands plus 6 meters using CW, SSB, RTTY and several digital modes. More information on this operation is on-line at www.qrz.com/db/TS8TI

On June 20, 1913, Wilhelm II (German Emperor) visited the village of Eilvese near Hannover on the occasion of the completion of the building of a 258 meter high radio tower, at that time the highest in Germany. The special event call sign DL100OUI (SDOK 100OUI) will be QRV throughout the year to remember the 100th anniversary of the first commercial radio contact between Germany and the USA from this location. OUI were the call letters of the German station at that time, the US station was located in Tuckerton, NJ.

The International Museums Weekend special event will take place on the double weekends of 15th & 16th June and 22nd & 23rd June. Radio amateurs are encouraged to participate in this event by setting up stations in their local museums. Organizer Harry, M1BYT, asks that all those intending to take part in the event should register their museum via the web form please, on the International Museums Weekend website www.ukradioamateur.co.uk/imw.

Have your local museums been activated?? Well, have they?

HANDY INTERNET SITE LINKS

www.hornucopia.com/contestcal

Contest calendar

www.w8np.org

The Massillon Amateur Radio Club.

www.w8lky.org

The Alliance Amateur Radio Club.

www.wd8aye.net

The Stark County ARES website.

www.tuscoarc.org

The Tusco Amateur Radio Club.

www.portcars.org

The Portage County Amateur Radio Service.

www.leara.org

The Lake Erie Amateur Radio Association.

www.erh.noaa.gov/cle/

The forecast office of the National Weather Service.

www.arrl.org

This is the grandpappy of ham radio clubs.

www.iarc.ws

This is the InterCity Amateur Radio Club.

<http://www.cmh.net/qcwa/>

This is the Quarter Century Wireless Association.

www.fists.org

The International Morse Preservation Society.

www.archive.org/details/73-magazine

This archive has old 73 magazines in PDF or eBook form. 73 magazine closed its doors in 2003.

W8AL

www.w8al.org

The Canton Amateur Radio Club, Inc.

P.O. Box 8673

Canton, OH. 44711



President - William Hannon (N8PW)

Vice President - Dale Lam (NX8J)

Secretary - Scott Duncan (KK8D)

Treasurer - Roger Gray (W8VE)

Trustee - Jerry LaRocca (KF8EB)

Trustee - Jim Manson (KA8JIM)

Trustee - Dennis Moriarty (K8AGB)

Trustee - Jerry Shrigley (N8YB)

Trustee - Justin Corner (W8JKC)

Trustee - Alan Lamb (KB9TAY)

Publicity Director - Dennis Moriarty (K8AGB)

W8AL repeater = 146.790 MHz

Our monthly meetings are held every third Wednesday at 7:30 P.M. at the Stark County EOC (Emergency Operations Center) at 4500 Atlantic Blvd. NE in Canton, Ohio. (lower level)

See our website for a handy map to the location. All are welcome, especially visitors.

TIP OF THE MONTH - PLL, CONT'D

A PLL is an electronic circuit (usually a single integrated circuit, or chip, nowadays) that consists of a VFO and a phase (or difference) detector. This phase detection circuit compares the phase (or timing difference) between the input reference signal and another signal that was derived from its output oscillator and adjusts the frequency of the oscillator to maintain the phase (or timing) of the two signals in very (or extremely) close time to one another.

If you have ever heard a high school band or orchestra rehearsing you may have heard one or more instruments being played off the normal beat from the rest of the group. These instruments are "out of phase" with the rest of the group. Another way to think of phase is on a longer time frame. Some clocks have an adjustment on the back to speed them up or slow them down. You compare the clock to WWV time or your cell phone time and see if it is running faster or slower than the reference clock. You adjust the Faster/Slower lever to place the clock "in phase" with the other time reference.

How is a PLL used in electronic gadgets, particularly ham radios? They are commonly used to demodulate FM signals. They are also used for AM demodulation, FSK (Frequency Shift Keying) decoders, Touch-Tone (DTMF) decoders. cell phones and satellites must have them to work. They are truly ubiquitous devices in most modern technology.

If you think this is a new idea, think again. PLL's circuits (analog) have actually been around since the 1930's. They were designed to improve the radios of the day. The problem was that the circuitry to create the PLL was expensive until the integrated circuit PLL was created by Signetics in 1969. RCA followed suit with their own PLL I.C. and the race was on. Televisions in the 1940's were the first extensive use of PLL circuits. The PLL was used to synchronize the vertical and horizontal sweep oscillators in the TV receivers to the transmitted sync pulses.

Nowadays a microprocessor has been coupled with a PLL to allow a radio to be programmed from a keypad. You can do things such as change the frequency, store several frequencies to be scanned or operate on two different frequencies at the same time. Listening to two different bands and transmitting on one of the two is also possible thanks to the PLL coupled with the microprocessor.

If you would like to learn more on this subject, or if you would like to suggest another topic for next month, send an email to ae7qu@hamradiowebsites.net.