

## CAARA Newsletter



CAPE ANN AMATEUR RADIO ASSOCIATION

#### FEBRUARY 2015 EDITION

## President's Desk

by Hank-W4RIG



Exciting times as the Patriots won the AFC

Championship and now the Super Bowl for 2015 - We had some great work by our Emergency Communications personnel during the Blizzard and continuing plans for the future of our station W1GLO. Personal thanks to Gardi KA1BTK for his work at the EOC during the Blizzard and the team of individuals who fed information to him. Reports on weather and public safety were duly noted and appreciated. We worked with the CERT team and the Sky Warn folks during the storm.

We appointed a long range planning committee chaired by Roger Smith KB1YTJ with assistance from Larry Beaulieu AJ1Z, Stan Stone W4HIX, and Dick Copithorne KR1G, to make recommendations on the building and the internal organization of the equipment and space utilization at 6 Stanwood.

All input from the membership will be appreciated and considered. Jon Cuningham K1TP and Jake Hurd W1LDL continue to do a great job in equipment sales and shipping, and Jon and Dean Burgess KB1PGH continue to carry the load with a great newsletter. We also had a fun time with Winter Field Day organized and led by Ruth Hodsdon WW1N.

If we get dug out of the snow, we hope to see more members and potential members at 6 Stanwood. Don't forget the CAARA Board meetings on the First Wednesday evening of each month and the member's meeting on the Second Wednesday of the month.

We hope to honor our attorney Meredith Fine at the meeting on February 11, so please plan on getting there by 7:30 PM. Our ARRL EMA Section Manager Tom Walsh K1TW has been invited to

attend the member's meeting. Hank W4RIG serves on Tom's Staff as State & Local Government Liaison and Dean Burgess KB1PGH serves as Local Public Information Officer. We hope to see you at the February members meeting and keep up the good efforts on behalf of W1GLO and Amateur Radio.

# Information Desk by Dean-KB1PGH



Well it's mid January and I have not yet received the my December copy of CQ

Magazine so their printing woes still continue to this day. I also read that CQ Magazine will be combining their January and February issues into one magazine and they will also be ending their "CQ Plus" addition that they had on their online edition of CQ Magazine so its still not looking good for them.

Moving on this months column will be the 3rd and last of the series of "How could you possibly be bored with ham radio" Now you have to remember that we have just be skimming the surface of what goes on in the HF bands during the course of day to keep you occupied with your HF radio.

The first topic I'll cover is HF radio nets. Now CAARA member Al N1QEH recently posted a great HF Net listing on the clubs Facebook page. It was created by N1YZ. You can also find this HF Net listing at <a href="https://www.n1cy.com">www.n1cy.com</a>. It covers all the nets by frequency and UTC time. You can see that there are social gathering nets, ARRL ARES nets and even a Christian based net. You can also see the SATERN or Salvation Army Team Emergency Radio Network net schedule as well. You can also find out more about the SATERN net and what the Salvation Army does at <a href="www.satern.org">www.satern.org</a>. So if you like to check in on nets the HF bands have plenty to offer. Now we'll move along to two other aspects to

keep your HF radio occupied. Now I know everyone likes to talk on the radio but not everyone has the patience just to LISTEN to the radio. Believe it or not the art of listening is crucial to

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CAARA Newsletter
Cape Ann Amateur Radio Association
6 Stanwood Street
Gloucester, MA 01930

CAARA Newsletter is a monthly publication of the Cape Ann Amateur Radio Association (CAARA). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to CAARA members, and space is available. Material is accepted on a first come, first serve basis. Articles and other materials may be submitted by internet to Jon at k1tp@arrl.net. If possible, material should be in Word format.Material may also be submitted as hard copy to Jon-K1TP or any Club Officer.

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Jon Cunningham- K1TP Editor Dean Burgess- KB1PGH Reporter

#### **Board of Directors- 2014-15**

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#### Welcome to CAARA:

CAARA, an ARRL affiliated club, operates the 2 meter W1GLO repeater on 145.130 MHz with antennas located on the Cingular tower in the Blackburn Industrial Complex in Gloucester Massachusetts. It has an average effective radius of 60 miles, and serves Eastern Massachusetts, Cape Cod, Rhode Island, Southern New Hampshire, and maritime mobile stations. CAARA also operates the W1GLO repeater on 224.900. The former W1RK 443.700 repeater with antennas located in Magnolia is now located at the CAARA clubhouse and has a very limited range.

The Association is one of the few amateur radio clubs that has its own clubhouse. Located at 6 Stanwood Street in Gloucester, it includes a permanent HF station with rotating beam and vertical antenna along with a 2 meter packet station and 2 meter voice and 220 MHz transceivers.

Amateur radio exams are held on the second Sunday of each month at 10:00AM at the CAARA clubhouse. Anyone who is considering a new license or an upgrade, is welcome to test with us. There is no pre-registration necessary. Contact the head of our VE team Bob Quinn if you have any questions about monthly testing. Monthly member meetings are held on the first wednesday of each month at 7:30 PM except for July and August

Each Sunday evening at 9:00pm, the club operates a 2 meter net on 145.130. This is an open and informal net which disseminates club news and prepares operators for emergency communications work. All are invited to check into the net as club membership is not a requirement.

New! The club is open every Tuesday from 4-8PM for CAARA members to stop by and socialize, as well as use the extensive collection of ham radio gear.

# **Information Desk** by Dean-KB1PGH

success on the bands. I especially like to point this out to all the New

Techies out there. Even though you can't operate much on the lower bands doesn't mean that you can't listen in and find out how the bands work ad how proper radio procedure works. Taking the time to listen to the bands gives you a great perspective as to how the DX conditions are as well. You can find out how contesting works just by listening to the exchanges. You can find out how the nets are run by the net controllers. You can even listen in on a friendly conversation between two hams which for the newbies out there is called a "Ragchew"

Speaking of that you really don't even need a net or a contest or a special event station to get on the air and talk. Just try calling "CQ" and have friendly chat or "Ragchew" with another ham across the world. Try giving the art of conversation a chance. You never know who you might meet on the air just by calling "CQ". This especially goes out to all the new Technician class operators out there who might be a little "Trigger Shy" when talking on the air. So in wrapping this series in keeping the boredom out of ham radio a ham radio that is turned off is a sad ham radio so make you HF radio happy by powering it up and getting on the air.

Get those electrons moving through you radio circuit boards and make some contacts around the world and don't be a victim of HF boredom!

One last thing,we now have a new ARRL EMA Section Manager and his name is Tom Walsh K1TW.

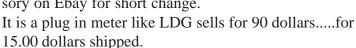
Next month we'll cover some thoughts on the "BACK UP" communications role of ham radio. See you then .

73 Dean Burgess KB1PGH ARRL Eastern Mass Public Information Officer

Photo of car on the right sent in by Ruth-WW1N

# Editor Roundup by Jon-K1TP

I own a Yaesu FT897, like the club owns, and saw this accessory on Ebay for short change.



The Yaesu meter is so small in the radio that this is a nice addition and lets you monitor the rig's vitals. One shortcoming I noticed right away was the meter is not lit which makes it is useless at night. I will mod it with a led light/resistor and 12 volt plug on the back to plug it into my power supply. The meter is available in white or black.





#### WHAT'S GOING ON AT THE CAARA EMCOM CENTER?

After almost 35 years, CAARA has purchased the building that has been its home from the City of Gloucester. The property has been owned by the City of Gloucester since 1867 and the building, once a schoolhouse moved to the site, then converted to a firehouse by raising the schoolhouse building and building a new first floor for the horse drawn fire engine, then a community center and later the home to the Cape Ann Flyers—a racing pigeon club.

CAARA leased the second floor from the pigeon club and later leased the entire building from the city. A few years ago, the Magnolia Historical Society bought a surplus schoolhouse from the city for \$1,000 and at that time, Stan Stone, then president, started the process of purchasing 6 Stanwood St from the city.

The process of purchasing the building including having it declared surplus, City Council committee meetings and approval by the City Council. The property was put up for bid for organizations with a "demonstrated capability of emergency communications". Needless to say, CAARA was the only bidder, and was approved and awarded the bid.

This was in December 2014. A slight snag occurred with a new neighbor concerning access to her property that took more than a year to resolve. CAARA was fortunate to have retained a sympathetic attorney who limited her fees, and put a lot of time and effort into the process.

With an agreement from the neighbor

in December 2014 and approvals from the City Council, the deal was done with the exception of the writing of the deed, which fell upon our beleaguered attorney to write, with the aid of one of our members's wife to read and interpret the handwritten 1867 deed. With the deed completed, the plot drawing showing access for the neighbor and the agreement signed, the deed had to be approved by the city's attorney—who had recently taken a job in Boston, and the mayor, who took a position in the new state government. All of the details were completed in the first week in January 2015 completing the process that took nearly two years.

The building consists of a large meeting room, kitchen, upstairs operating room with five stations, and two bathrooms. Outside is a 30' tower with a tri-band beam as well as several verticals. The facility also houses as USGS Netquakes seismometer that sends seismic data to a national reporting center.

With the complete ownership of CAARA's home, there is a long term view of the building—how best to maintain it and adapt it for the best use of membership. CAARA's home is finally secure.

Hi Jon.

I was curious how it broke down in the members list of how many there were of each license class in the club.

This was the count I got: 35 technician, 5 advanced, 33 general, 43 extra, 3 supporting members, no license — 119 total members. I

thought we had a lot of Extras but I didn't realize we had that many. Anyway, fun to know. Ruth - WW1N

FCC "PAPERLESS" AMATEUR RADIO LICENSE POLICY GOES INTO EFFECT FEB. Starting February 17th, the FCC no longer will routinely issue paper license documents to Amateur Radio applicants and licensees. The Commission has maintained for some time now that the official Amateur Radio license authorization is the electronic record that exists in its Universal Licensing System or ULS, although the FCC has continued to print and mail hard copy licenses. Under the new procedures, licensees with an "Active" status only will access their current official authorization via the ULS License Manager. The FCC will continue to provide paper license documents to all licensees who notify the Commission that they prefer to receive one. Licensees also will be able to print out an official authorization - as well as an unofficial "reference copy" - from the ULS License Manager. According to Commission's Wireless Telecommunications Bureau, the new procedures will save some \$300,000 a year, including the cost of staff resources. In addition, the WTB says the new process will quote—"...improve efficiency by simplifying access to official authorizations in ULS, shortening the time period between grant of an application and access to the official authorization, and reducing regulatory costs."

### BIG COMPANIES by J.Pallazola, WB1CHJ

Nov. 26th the day before Thanksgiving day when my sister, who is my Nurse, Chauffeur, Domestic Engineer and my Barber, Bet doesn't do hair styling, she specialize in one cut called No Strand Left Standing. On this day, as she has done many times in the past Bet became my secretary. Anyone who has ever dealt with a large company knows how difficult and perhaps most time consuming it is to get a human voice.

First of all, you get a recording with two hundred options and you pick one with the hope of hearing a human voice. Verizon is no exception to the rule. Another recording comes on with "ALLAGENTS ARE BUSY AT THIS TIME. AN AGENT WILL BE WITH YOU IN TEN MINUTES" Now, the music starts a instrumental you never heard before and don't care if you ever hear it again. You will hear that recording several times, during which time you can wash the car, mow the lawn, go to the super market and come home to hear the same message. Almost too good to be true a voice comes on, "Hello I'm Chris, Please wait while I get your file" Chris returns, "How can I help you?" Bet answered "I'm calling for my bother Joseph, he would like to have a technician come out and install WI-FI" Chris came back, "I'm transferring you to the tech department" Two more transfers before Bet got someone who could make an appointment for DEC. 3rd between 8 a.m. and 11 a.m..

NOTE: Sequence of DATES: On Nov 29th, I checked my email and this is what I read:

#### Dear Joseph:

A Verizon technician is scheduled to arrive at your home on Nov 28, 2014 between the hours 8:00 a.m. and 5:00 p.m.

- 1. My appointment is DEC. 3RD, NOT NOV. 28TH
- 2. At any rate I was home all day on Nov. 28, 2014
- 3. Nov. 29th I sent a email to Verizon asking them to please get on the same page. My appointment is DEC. 3RD
- 4. The next day, I received a call telling me a tech will be here on DEC. 2, 2014 between 8 a.m. and 5 p.m.. At this point, I didn't care if they came at midnight. In past Verizon techs have done good work and this house-call was no exception.

The lady tech was excellent. She has worked with Verizon for 23 years. She increased the computer speed by replacing wires, router and telephone jack.

At last, I have WI-FI in my shack! I use my apple to get propagation reports, DX spots, look up calls on QRZ and logbook.



#### "Proper" English

by Curtis Wright- AA3JE

Once, about three thousand years ago, there were people from the last ice age living on cold, wet island off the coast of Europe.

They were a simple people, whose language had thirty words for "lice", a hundred words for "rain", and who lived by the sea, digging clams at low tide. They ate the clams, sometimes even washing the sand off first.

One day a Phoenician trading ship was blown off course by a storm. It landed on the island of the clam eaters. They learned many words in Phoenician.

"Yes, we can fix it. But it will be expensive."

"You want to buy clams? Best kind. Very cheap."

"Very good liquor. You wantee buy?"

"You like girls? Pretty girls?"

The Phoenicians came and went, but the clam people kept the words.

Many years later, the Romans came. Strong soldiers with bright swords. Conquered the clam people. They learned many words in Latin.

"Of course my girls are clean!"

"It's not sour! It's my very best wine!"

"You like gamble? Win big? Have fun, soldier?"

"You say it hurts when you make water? Probably something you ate."

The Roman Empire fell, and the clam people lived in peace with their new words.

Then the Angles and the Saxons came, and the clam people had to struggle for a while because their language was a little odd.

"Land? Is it land that you want? Sure we got land! Best kind! Real cheap!"

"Iron? I can get it from my cousin, pretty expensive though..."

"You and the boys looking for a little fun? Maybe drink a little?"
"Whatever you want, squire, I know how to find it."

Many years later, the Christian Missionaries came, and the clam people learned even more words.

"Oh no, nothing like that here, Father."

"She's my sister, really! S h e

had to take her blouse off cause of the fever."

"Writing? Like on paper? Not really."

"Sure we can build a monastery, be e x p e n s i v e though."

Then came the dark times, with the terrible Vikings in their long, dark ships. The clam people had to learn many new words.

"Yes, we can fix the boat, cost a lot, though."

"You are not going to take it all, are you?"

"Not one of my girls has lice! That's a big lie!"

"You can just leave the door of the monastery open when you leave, the wife and I need to do some shopping."

Finally, the French came over in boats, and THEY conquered the clam people. Who now had to learn many new French words.

"Why do you want......? No, wait, I don't want to know."

"What do you mean the beer tastes like horse piss? We ain't got no horse."

"Honestly sir, that is all the food we have. My wife are not fat, it's a glandular thing."

"Castle? Sure, we can build that. Cost you a lot, though."

Pushed into a corner, at last the clam people threw off their Norman oppressors! (Well, actually, not so much, they kind of slept their way into the ruling class). And a bright new day of trade opened up for the tiny island. (Cheap goods, best prices, open 24 hours, no waiting!) Of course, this meant a flood of new foreign words, from places like Spain.

"Sure it's pure gold. It's just a little tarnished there."

"Genuine exotic dancers, all the way from Wales, you will like."

"No, no, we age the beef! Just scrape that bit off. It's a sign of quality."

"Sure we can fix your galleon, cost a lot, though."

Finally, with the age of coal and iron, the clam people pushed out, all over the world, sweeping in new words and phrases from all corners of the globe!

"Oh that? It's just a heat rash, it will clear up. Don't worry about it." "Finest cotton, no it is NOT moldy, just needs airing." "Would I cheat you? No sir, not a friend like you."

"Sure we can buy your beaver pelts, prices are kind of low though. Market forces."

And then, the scholars of the clam people, in a terrible announcement, revealed that there were not any actual native words left in the clam people language. They had stuffed so many loan words, and foreign words, and borrowed words into their language, that it was all patched together with tape, and string, and bits of glue.

But it sure was useful. It was so complicated, and so twisted, and so hard to learn, that the natives could tell a foreigner the moment he or she opened their mouth, which was very helpful in conducting, er, honest trade.

"This model is an absolute bargain, and so cheap, it is like driving on a cloud."

"Oh, this neighborhood is very safe. Great schools, and your kids learn self-defense!"

"The workers here are so hard working, they only need to come in half the time!"

"Oh no ma'am. The entertainers will not be a bit of trouble. Very quiet and nice."

So if you have trouble speaking proper English, just imagine yourself squatting in the mud, on a river bank, trying to figure out how to establish trade with the latest group of foreigners, open your mouth wide, and say,

"Oh sure, we can get you that, gonna cost you though!"

### The Ten Commandments of Ham Radio

(author unknown)

Thou shalt not love thy radios more than thou love thy wife and children; as much, but not more.

Thou shalt not covet thy Ham friend's radio, nor Ham shack, nor his packet controller or computer.

Thou shalt not store any antique radios or other treasures on the kitchen table nor in the living room.

Thou shalt not read "CQ" nor "QST" on company time, least thy employer make it impossible to continue thy payments on the new tower.

Thou shalt not despise thy Ham friend's new Kenwood Dual Bank Mobile, nor continue to deceive thyself in thinking thou hast the most deep and melodious voice on the repeater.

Thou shalt not allow thy sons and daughters to get married on the Holy Days of Ham-Com, Field Day, or Contest Weekends.

Thou shalt not deceive thy wife into thinking thou art taking her for a romantic drive in the country when, indeed, thou art going to look at another radio.

Thou shalt not tell thy wife the entire cost of thy Ham Station, at least not all at the same time, thy treasures picked up at the sidewalk sale are, naturally, not included.

Thou shalt not promise thy wife a new addition to thy house and then use it for a Ham Shack. In turn,

thou must stop telling thy wife that the new radios on thy Ham desk belong to a Ham friend and that thou art merely working on them. Telling her that thou won them at Ham-Com is, naturally, okay.

Thou shalt not buy thy wife a new power supply for Christmas, unless of course, thou canst con her into becoming a Ham.

Let me know what you think! As always, feel free to contact me via email or twitter with any suggestions for the website!

73, Joe KDØLOS

#### MARCH ISSUE OF AMERICAN LEGION MAGAZINE TO FEATURE AMATEUR RADIO

The March 2015 edition of American Legion Magazine will include a feature article about the hobby of amateur radio. [Skeeter:] Written by best-selling author Don Keith, N4KC, the article explains how ham radio remains exciting, important, and relevant, even after one-hundred years of existence and so much technological change. It also reminds American Legion members about their organization's own club-The American Legion Amateur Radio Club or TALARC-as well as how its members can get their licenses, establish club stations at more of the 14,000 posts around the country, and more. The Legion has an agreement with the Department of Homeland Security for assistance during emergencies and the article talks about how amateur radio meshes well with that effort. American Legion Magazine is distributed to the veterans' organization's 2.3 million members as well as through other outlets.

### E Q U I P M E N T REVIEW

#### by Dean-KB1PGH

As I continue to operate HF Portable I am heavily relying on DC power so I am always looking for a way to keep improving on

my DC power system to keep my portable HF station up and running with new options and without a glitch. I have slowly been building my DC power options up over the past few years.I always used my Marine DEEP cycle group 24 battery for DC power until last year when I purchased a Honda EU 2000I generator.I then wanted to find the option of bringing both just in case for emergency operations use but wanted to find a way to keep the battery charged in between using both systems. Well I asked Santa to bring me a Super PWRGate PG 40S by West Mountain Radio and lo and behold there was one under my tree-THANKS SANTA! The Super PWRGate PG 40S is a DC power 12 Volt uninterruptible power system that goes in between a power supply and a 12 volt battery. The PG 40S uses the ARRL ARES and RACES standard DC Anderson powerpole system of connectors. As you can see there are 3 connectors on the device. Your AC to DC 12 volt power supply goes on the first connector, the lead to your radio goes on the second connector and whatever 12 volt battery you have goes on the 3rd connector. The Super PWR gate PS 40 is also a 4 stage high performance charger battery with trickle, bulk, peak and float mode of charging 12 volt batteries.For example, lets say I am working field day and have the Super PWR gate set up in between my Honda Generator and my deep cycle battery. I can run my generator all day until it gets dark



out, then shut the generator off for quiet battery operation and while others sleep. When I shut the generator off and the SuperPWRgate

instantly switches over to battery power there is no voltage sag because the device has two high amp diodes that prevent any power loss. My Icom 7000 will not lose power or even flicker during the switch over. The neat thing is the Super PWR gate PG

40s has been keeping my group 24 deep cycle battery at full charge all day long so I'll have enough juice to last all through the night. The next morning I can turn on the generator again and it will high performance charger will go to work juicing my battery right back to full voltage! The PG 40s can charge wet cell lead acid, gel cell and AGM (absorbable glass mat) batteries. If you look at the picture of the inside of the unit you can see on the bottom right center a blue jumper which you can install to





operate AGM batteries which require a voltage current of 14.5 volts. This unit can also charge different battery sizes by its selectable 1,4,7 or 10 amp fuse system. You can see the two 40 amp red fuses on the top which can either take out both for small batteries, or leave in one or leave in both for larger size batteries. The Super PWRgate PG 40s is a small unit with a size of 1.65"H by 5.25"W by 3.9"D. The build quality is excellent with nice machined screws and a nice thick aluminum body which acts as a giant heat sink. The PG 40S runs for \$139.95 but you may be able to get a lower price when they do rebates. You can find the Super PWRgate PG 40S and many other products DC power at www.westmountianradio.com.

#### WW1USA OBSERVES CENTENNIAL EVENT FROM WORLD WAR I FEBRUARY 7TH AND 8TH

Special Event Station WW1USA of the National World War I Museum at Liberty Memorial in Kansas City Missouri will be on the air February 7th and 8th. This in observance of the Beginning of War from the Air. [Skeeter:] To commemorate this event, planners invite licensed amateur radio operators in the region to come to the museum to put the station on the air during this special event. Operating time slots are available on a first-come / firstserved basis. If you work WW1USA during this event, QSL electronically via eQSL. Paper QSL's will require an S-A-S-E. More information including other OSL routing is on the web at ww1usa.org. [Hal:] That's Newsline's Skeeter Nash N5ASH in Topeka, Kansas. (WW1USA) \*\*

#### **NOVICE RIG ROUNDUP**

Make a big note on your calendar that

the Novice Rig Roundup will be here soon. It runs February 6-13th and you can be sure to enjoy the fun. You'll hear most of the rigs pictured above —rigs some of you might even have used as a novice. As described on their site, the event is a week of amateur radio activity in February where you can contact stations using vintage ham radio equipment from the early era or the Novice License. Any licensed radio amateur may participate. You can use ANY radio equipment you like, but the scoring will be higher for those using real novice era radios! For more details on the even, including suggested frequencies www.novicerigroundup.com. (Brian Carling AF4K)

#### **DXCC Country/Entity Report**

According to the Amateur Radio Cluster Network for the week of Monday, 26th January, through Monday, 2nd February there were 220 countries active.

Countries available:

3A, 3B8, 3B9, 3V, 3W, 4J, 4L, 4O, 4S, 4U1I, 4X, 5B, 5H, 5R, 5W, 5Z, 6W, 6Y, 7Q, 7X, 8P, 9A, 9G, 9H, 9J, 9K, 9M2, 9M6, 9N, 9V, 9Y, A3, A4, A6, A7, A9, AP, BV, BV9P, BY, C3, C5, C6, CE, CE9, CM, CN, CP, CT, CT3, CU, CX, CY0, D2, D4, DL, DU, E4, E5/s, E7, EA, EA6, EA8, EA9, EI, EK, EL, EP, ER, ES, ET, EU, EX, EY, EZ, F, FG, FK, FM, FO, FR, FS, FW, FY, G, GD, GI, GJ, GM, GU, GW, H4, HA, HB, HB0, HC, HH, HI, HK, HL, HP, HR, HS, HV, HZ, I, IS, J2, J3, J5, J6, J7, JA, JT, JW, JX, JY, K, KG4, KH0, KH2, KH6, KL, KP2, KP4, LA, LU, LX, LY, LZ, OA, OD, OE, OH, OJO, OK, OM, ON, OX, OY, OZ, P2, P4, PA, PJ2, PJ4, PJ5, PJ7, PY, PZ, S0, S5, S7, S9, SM, SP, SU,

SV, SV/a, SV5, SV9, T32, T33, T7, TA, TF,
TG, TI, TJ, TK, TR, TT, TY, TZ,
UA, UA2, UA9, UK, UN, UR,
V2, V3, V4, V5, V6, V8, VE, VK,
VP2E, VP2V, VP5, VP8, VP8/h,
VP9, VR, VU, XE, XU, XW, YA,
YB, YI, YL, YN, YO, YS, YU, YV,
Z2, Z3, Z8, ZA, ZB, ZD7, ZD8,
ZF, ZL, ZL7, ZP, ZS

### ARRL LIBRARY NOW ONLINE

The ARRL Library is now online. This online library is a repository of educational presentations and oral histories. It will initially consist of three major areas. These will include: PowerPoint presentations that may be used at club meetings, outreach efforts to the general public or other public presentations; PDFs of general educational material about amateur radio; and oral histories of radio amateurs describing their personal experiences with amateur radio. For the Amateur Radio Newsline

You'll find the ARRL Library on the web at arrl.org/library.



Ruth- WW1N sends in a pic of Grimm and Ruth's portable shack.

#### WINTER FIELD DAY AT THE CLUB

Winter Field Day was in a true winter setting with snow blowing and on the ground ... a prelude to the blizzard that followed a couple days later.

Because of the storm and flu not many members made it but we operated the full 24 hours anyway. Bill Canty and his grandson, Jeffrey, John Graves, Jake Hurd, Gardi Winchester, Hank McCarl, Stan Stone and his wife, Sandy, and daughter, Katy, Paul Anderson, Matt Allred, and myself all came Saturday.

We operated in digital, SSB, and CW modes. Stan and his family served up a delicious spaghetti dinner that all enjoyed.

By around 10:00 or 11:00 Matt left and that left just Paul and myself operating for the night. Roger came by and left some air mattresses but we kept at the radio all night and ended up not using them. Thank you to Roger anyway.

The bands were pretty much dead though. We stopped around 7:30 the next morning. At 10:00am Sunday Paul and I tried again and finally got the pileup we were looking for all the previous night. For two hours (until the end of the event) they came back as fast as Paul could call out and I could log. Dean, Dave, and others came by and watched as with our headphones on as we kept at it. That was fun!

I apologize to anyone who's name missed here.

Anyway with a few minor hiccups mostly due to lack of familiarity with the radios all operators did well.







We'll know the final total by the next newsletter but I'm estimating all modes together at around 100 contacts.

Thank you to those that did all the work to prepare for the event and to all that came.

#### 73, Ruth WW1N

I've got all of the QSOs together and pretty much in Cabrillo format (not quite ready for submission).

We had 118 QSOs, a few busted (missing or incomplete exchange). Contacts were made on

40m: CW, Phone 20m: Phone, Digital

15m: Digital

That gives us a multiplier of 5, so our score will be around 575 points. Next year we should definitely use the contest software you recommended—it would have made the reporting a snap. I may go ahead and purchase it (you only need one license per site) and install it.

I will probably submit the report in a few days as soon as I have it in the right format.

Stan-W4HIX

(More photo's on next page of Winter Field Day at your club.)













# CAARA REPRESENTS AT GLOUCESTER EOC DURING THE WINTER JUNO STORM







#### IDEAL NOALOX ANTI JOINT COMPOUND BY DEAN- KB1PGH

I thought I would let other know about this product since I have been using it on my Buddipole Antenna. It's an Anti Oxidant Joint Compound called Noalox from Ideal. This is a gel that contains suspended zinc particles.I learned of this product when the accessory antenna arms and whip antennas started to stick together during use. I actually had a small metal burr and a bit of metal dust from the factory in one of the connectors which caused then to seize together. Luckily I got them apart.Plus just from general use of taking the antenna apart and putting it back together out in the field a bit of dust and dirt can build up in the joints.I then began to think that this compound would work great for any hams who currently have, or plan to install any outdoor verticals or beams. Of course most of the outdoor ham antennas are made of aluminum and we all know that on Cape Ann the salt from the sea air can corrode anything. The Ideal Noalox compound reduces galling and seizing on all aluminum conduit joints. It also promotes good ground continuity which comes in handy for anyone planning to install a vertical with a bunch of ground radials. Noalox also provides additional inner

strand and inner conductor current paths for improved conductivity. So it helps provide more of your electromagnetic energy leave your antenna instead of having that typical white coating of aluminum oxide on your antenna connections. Electricians use this product too for any outside applications. A 4 oz tube of Noalox is about \$6.00 and can be found at the electrical department at Home Depot or online at Amazon. Now just a word of caution. This compound CONDUCTS electricity at antenna joints. For all other aluminum joints that do not conduct electricity such as the nuts that go onto u clamps that hold the antenna together and at the tower you can use just regular "Anti Seize" compound which you can find at you local auto parts dealer. Mechanics use this stuff to keep spark plugs from seizing in their sockets inside the motor.



#### A SHORT, SHARP, SHOWER OF S\*\*T

I have never actually bought a dog.

Oh we have had dogs continually, as a family, but we never bought one.

We just ended up "giving one a home".

This has resulted in our getting some pretty strange animals in our time.

Inga was one of a litter of 8 Labradors that needed culling. My mother took her, and tried to raise her, and I had to take the dog when it was too much for mom. She was very little, eyes still closed, and we had to nurse her for weeks. She turned out to be a good dog, but had a "stick eating" habit. This meant that we had to dose her with mineral oil every now and then to clear a blockage. Since she slept with my son's bed in his younger years, this led to middle of the night excitement and a larger than usual laundry bill. Pre-treat mineral oil stains with non-abrasive waterless hand cleaner, they come right out.

Farley was "rescued" by my son when he was on his way to be euthanized due to a biting habit. We were, of course, not told about this little problem. He was a spaniel, and had bad ears. We discovered he was a great dog, unless and until you tried to put anything into his ears. Then he became a sort of pint sized wolf who tried to eat you. Eventually, we found a vet who rebuilt his ear canals, so they drained properly, and after this cosmetic surgery he

was pain free and the probl stopped.

Cedric was half wolf. Brought back from college in West



Virginia by my son. He was good dog, but really wanted to be pack leader. So I had to do the "alpha male roll over" about every fifteen minutes for two years till he realized I was not stepping down. After that he was OK. It did startle house guests when I stopped talking, flipped the dog upside down, and growled. Well, house guests who didn't know me, anyway.

Beauregard was a rescue dog who had lived on his own as a scavenger in a park for a while. He was a great dog, but had a bad habit. His faith in his digestive tract was legendary. Faced with something new, say a rotten seagull or a five pound bag of onions, he would eat it. If it was real bad, he would vomit it up all over the living room. If it was not so bad, he would have diarrhea all over the bedroom. Either way, he was happy. Me? I bought the upholstery and carpet cleaners the homicide cleanup teams use.

Daisy was a little dog we got because she was so quiet. We signed the papers, took her home, and then my wife said, "Is that green mucous draining from her nose?" After we go the pneumonia treated, she became a great dog, but alas, no longer quiet.

Max, the latest dog, came from a rescue service, along with a strange

set of veterinary records. They make no sense, till the first time Max had to relieve himself (number two). Suddenly, this quiet, well behaved dog started twirling in a circle, and yelping, also defecating. So it was off to the vet, who examined him carefully. (So carefully that if it had been me, I would have insisted on an engagement ring).

Nothing. The dog's butt and rear passages were fine. So we were sent home with instructions to put him on stool softener. This we did. The result was that when the dog did his business, there was a circular spray of very soft stool, which I referred to as a short, sharp shower of s\*\*t. We keep trying to find a cause, which means the dog gets nervous at the vets. I tell him to demand a pre-nuptial agreement.

One day, just once, I want a dog from a reputable breeder. A normal dog.

The FCC's latest wireless auction brought in far more money than anyone expected.

The Chairman, Tom Wheeler, set a goal of raising \$10.6 billion by selling off 1,600 licenses to blocks of wireless spectrum. In the end, the government not only blew past its goal, but also its previous record of raising \$19.1 billion in 2008, when it auctioned off significant pieces of the 700Mhz band that delivers LTE for a number of carriers. This auction ended with the government raising \$44.9 billion, which surprised many observers, especially since even smaller markets like Portland, ME received sizable bids worth tens of millions of dollars.

Who won which pieces of spectrum in the 1,700Mhz and 2,100Mhz bands is unknown right now, but we do know that 70 different companies and organizations submitted bids. Obvious players were involved, like AT&T and Verizon, but Dish also participated, as did some private equity firms, like Grain Management LLC. Interestingly, Sprint sat this one out, though the company does have what the *Wall Street Journal calls*, "largest stores of spectrum" in the industry.

Part of the reason people were shocked by the high price tag, is that these higher frequencies are actually considered less valuable than lower bands. That's largely because they're unable to cover as much distance or penetrate buildings as easily. But, since they're able to carry large amounts of data over short distances, they can be very useful in cities.

Hopefully we'll have more information about who won what soon, but for now lets just enjoy the cash windfall for the government and the American tax payer. Of the nearly \$45 billion, \$7 billion is already earmarked for a nationwide broadband public safety network, \$115 million is going to help implement the next generation of 911 networks and \$20 billion is going straight to deficit reduction.



#### THE GOOD OLD DAYS.....

#### The Fun has Begun: K1N Navassa Island DXpedition is On the Air!

Decisions, decisions. Watch the Super Bowl or try to work the K1N Navassa Island DXpedition? Given that the Super Bowl happens every year and that a chance to work Navassa Island (KP1) might not happen again for another 10 years, a multitude of North American operators picked the latter option. Many elsewhere in the world apparently were in less of a quandary. The K1N team operators fired up on 40 and 80 meter CW sometime around 0100 UTC, welcomed by gargantuan pileups — with stations stretching 10 to 20 kHz or more up the band from K1N's transmit frequency. Preparations are under way to expand operation to other bands.

The US Fish and Wildlife Service (USFWS) controls access to Navassa Island (KP1), and it's been more than 22 years since it was last activated. ClubLog's DXCC Most Wanted List puts Navassa Island at #2 overall, right behind North Korea. (KP1 is #1 on phone, #5 on CW, and #4 on digital modes.) K1N will not be operating on all modes on all bands but plans to limit most bands to a specific mode, "so that we can work the pileups

#### "CREATIVE FUND RAISING"

#### **Ouestion:**

What are perhaps the two most important priorities which insure the continued good health of any club or organization?

#### Answer:

- 1. **The membership**, They work together as a team for the continued success of the club or organization to which they belong and whatever its mission happens to be.
- 2. The financial health of the club or organization, which enables it to operate and carry out its various activities. These operating funds are typically generated either through membership dues, or other fundraising efforts.

Raising funds is never an easy thing to do. Especially in these challenging times. But it is a very necessary activity.

Last month I picked up at the club a small quantity of coax and Screw on fittings that were deemed of no use to the club.

Recently, these surplus items were turned in to a recycler. The amount that was raised from these items may at first seem like a small number. But when one considers that these items were destined to be discarded, that small number suddenly becomes a decent number. (Who was it that said "pennies make dollars and dollars make sense")? Remember that great quote? I think that we all have heard that wise advice at one time or another. Exactly my point.

And the best part is that no one had to be approached in person and asked for money! Now that's "Creative Fundraising".

Asking for your no longer wanted or needed coax is just the first of what will over time become a constantly growing list of your surplus items that you will be asked to bring in to the club. And it will be turned in to the recycler with every penny collected turned in for the benefit of CAARA!!

So there it is folks, part one of "Creative Fundraising"!

Please look around your shack, as well as your house and yard too. Even small amounts of coax and any other metal items will generate much needed funds for the benefit of CAARA, its mission, and its members. Just bring it in with you and CAARA'S fund raising committee will "TURN YOUR TRASH INTO CASH"! David Linsky, KA1/LKX





#### LET'S DO GROUND PLANES AGAIN

The Spanish language has a whole bunch of words which mean *hot*, while English gropes around with about two or three. Spanish gets a little fuzzier with the word *Ground*, but not nearly as much as English. We have the ground we walk on, hollowed ground, DC grounds, AC grounds, RF grounds, and grounds for divorce! We also have polo grounds, capital grounds, football grounds, common grounds, proving grounds, battle grounds, and even ground zero. Any one of these is certainly not any other. So it's no darn wonder neophyte amateurs (and a fair amount of old timers) get confused about which ground is which.

There is one type of ground that needs a different name applied to it because everyone seems to have a different opinion of what it is or isn't, and that is *Ground Plane*! In fact, there is an alternate name which seemingly has disappeared from the amateur lexicon, and that is *Image Plane*.

A quarter wave vertical antenna is nothing more than half a dipole. This is why it is sometimes referred to as a *monopole*. We wouldn't erect a dipole with just one leg, so why is it amateurs will erect a quarter wave monopole (vertical) without an adequate Image Plane (ground plane) under it? In part, it's because they're confused by all of the different references to ground (excuse the pun).

Exploring the Image Plane a little deeper; in very simple terms, an Image Plane is the missing half of a dipole. Again, in simple terms, it transforms a monopole into the functional equivalent of a dipole. In a ground mounted monopole, radials provide the Image Plane. On a vehicle, it is the metal mass, plus the capacitive coupling to the surface under it which provide what little Image Plane there is.

If there isn't an adequate Image Plane, losses increase drastically. A full-size, quarter wave monopole, will have an input impedance of roughly 35 ohms. If yours measures 50 ohms, the difference is most likely caused by an inadequate Image Plane. Contrary to popular belief, a ground rod is not an Image Plane. In other words, it isn't a replacement for radials.

Mobile wise, even the largest of vehicles are inadequate in terms of an HF Image Plane. Improper mounting (using mirror brackets for example) just adds insult to injury. Here too, a ground strap is NOT a replacement for the requisite Image Plane.

In a recent post here on eham.net, this very point was exemplified; an HF antenna was mounted on a semi's mirror bracket. One responder suggested adding another ground strap, assumedly to increase the Image Plane, and lower the SWR (one of the reasons for the original post). A link to photos of the responder's own installation was provided as a *how-to* example. The photos depicted a very good quality HF mobile antenna mounted in the same mirror bracket location, replete with a ground strap. There was no matching device in evidence in any of the photos.

This fact, graphically illustrates the additional losses incurred by this form of mounting. The reason is simply this; in an average mobile installation, the antenna in question will have an input impedance of about 25 ohms. Since the reported SWR *was less than 1.2:1*, the input impedance was either 41 ohms, or (most likely) 60 ohms. The difference is commonly referred to as ground loss, but it really relates to an inadequate Image Plane under the antenna. In any case, the efficiency stinks, the number of DX contacts notwithstanding!

So, just in case you missed the point, a ground strap (or a ground rod) is not a substitute for an Image Plane/ Ground Plane, or what ever you wish to call the missing half of your monopole (vertical). If you think it is, then it is you that's on shaky ground!

Alan, KØBG

www.k0bg.com

# 15 US schools move forward into the next stage of ARISS selection

The Radio Amateur Satellite Corporation (AMSAT) and

the American Radio Relay League (ARRL), US managing partners of **Amateur Radio on the International Space Station** (ARISS), are pleased to announce that 15 of the schools/organizations that submitted proposals during the recent proposal window have been accepted to move forward into the next stage of planning to host a scheduled contact with crew on the ISS during 2015.

This is a significant step in ARISS' continuing effort to engage young people in Science, Technology, Engineering, and Math (STEM) activities and raise their awareness of Human Space Flight.

ARISS-US was encouraged by the high level of interest in the education community evidenced by the significant number of submitted proposals and the quality of the submissions.

The ARISS program anticipates that NASA will provide 12 scheduling opportunities for US host organizations for the May – December 2015 time period. These 15 schools/organizations must now complete an acceptable equipment plan that demonstrates their ability to execute the ham radio contact. Once their equipment plan is approved by the ARISS technical team, the final selected schools/organizations will be scheduled as their availability and flexibility match up with the scheduling opportunities offered by NASA. ARISS does not expect to be able to schedule all 15 schools on the list.

The schools and organizations are:

Bay View Elementary School, Burlington, WA

Corpus Christi Catholic School, Chambersburg, PA

Daggett Montessori School K-8, Fort Worth, TX

Dearborn Public Schools, Dearborn, MI

Grady High School Robotics Team, Atlanta, GA

Kopernik Observatory & Science Center, Vestal, NY

Maconaquah School Corporation, Bunker Hill, IN

Moon Day/ Frontiers of Flight Museum, Dallas, TX

New Mexico Military Institute, Roswell, NM

Pima County 4H/Vail Vaquero's 4H Club, Tucson, AZ

Space Jam 9, Rantoul, IL

Ste. Genevieve du Bois Catholic Elementary School, Warson Woods, MO

Tulsa Community College, NE Campus, Tulsa, OK

United Space School, Seabrook, TX

West Michigan Aviation Academy, Grand Rapids, MI

#### **ABOUT ARISS**

Amateur Radio on the International Space Station (ARISS) is a cooperative venture of the Radio Amateur Satellite Corporation (AMSAT), the American Radio Relay League (ARRL) and the National Aeronautics and Space Administration (NASA) in the United States, and other international space agencies and international amateur radio organizations around the world.

The primary purpose of ARISS is to organize scheduled contacts via amateur radio between crew members aboard the International Space Station (ISS) and classrooms or informal education venues. With the help of experienced amateur radio volunteers from amateur radio clubs and coordination from the ARISS team, the ISS crew members speak directly with large group audiences in a variety of public forums such as school assemblies, science centers and museums, Scout camporees, jamborees and space camps, where students, teachers, parents, and communities learn about space, space technologies and Amateur Radio. Find more information at http://www.ariss.org, http://www.amsat.org and http://www.arrl.org.

#### Radio hams use Skype for club talk

The **Fond du lac Amateur Radio Club** will be using their Skype equipped meeting room for a presentation by **Eric Swartz**, co-founder of the Elecraft company

The meeting takes place on Monday, Feb. 9, at 7 p.m. at Moraine Park Technical College in Fond du Lac. This meeting will be held in room A112, which is the World Link room on the Fond du Lac Moraine Park campus. The room is equipped with a very large projection screen which will be used for a "Skype" contact to the headquarters for Elecraft in Aptos, California, a company that produces high quality Ham Radios in kit form delivered around the world. The guest speaker for the event will be Eric Swartz, cofounder of the Elecraft company.

Why would someone want to build their own Ham radio? Some enjoy building so much that they'll build a kit for others! Most would tell you that hand-assembling a modern transceiver offers a much richer experience than simply operating it. And when you're finished, you'll have a radio that you can understand, repair, and even modify. But these radio kits from Elecraft have performance and features you simply won't find anywhere else.

New hams might be surprised to learn that just a few decades ago, most operators built at least some of their own equipment. Hands-on was the rule, not the exception. This aspect of the hobby has seen a renaissance recently, thanks to the efforts of kit-oriented clubs and small manufacturers. Elecraft was founded in the midst of this kit revival.

Read the full story at <a href="http://www.thenorthwestern.com/story/news/local/community/">http://www.thenorthwestern.com/story/news/local/community/</a>

2015/01/29/local-ham-radioenthusiasts-will-examine-kitbuilt-ham-radio-live-via-skype/ 22566031/

#### SolderSmoke Podcast

Episode 171 of the amateur radio podcast **SolderSmoke** is now available

In this edition:

- Pete's Small Screens (in Color!)
- Si5351s
- Bill's Graph Paper Frequency Readout
- Bill's Broadened Barebones Barbados RX. DIGITIZED!
- Another AD9850 DDS using M0XPD Kanga UK Shield
- New 13 dollar Color Display (Prettier than Graph paper!)
- The DEEP SPIRITUAL REWARDS of DC Receivers
- The Importance of Good Power Supplies
- SPRAT Article on HW8 Design Error
- Latest Edition of Hot Iron
- Elecraft KX3 Has one of the best receivers in the world

Pete and Ben's Article in QRP Quarterly available free here: <a href="http://www.qrparci.org/qqsample/qqsample.pdf">http://www.qrparci.org/qqsample/qqsample.pdf</a>

Listen to

http://soldersmoke.com/soldersmoke171.mp3

ARE YOU AS SMART AS SOMEONE IN KINDERGARTEN? 5 YEAR OLD PASSES TECH EXAM!

KUSA- Ham radio can be a hobby for some and a mission

for others.

"We coordinate with agencies like the Red Cross or the local sheriff, the weather service to give reports during emergency situations. We're the extra eyes and ears on the ground," ham radio operator Zeke Ragdale said.

It's something Ragdale has been doing for the last three years, and it's a hobby his 5-year-old son, Colton, has been watching. That was until Colton was old enough to read.

"I think Colton saw his parents using radios and talking to one another and wanted to become involved. So he took the FCC test and passed," Ragdale said. At just 5 years old, Colton passed the test the FCC requires for anyone to operate the radios. That makes Colton among the youngest operators around.

"He was talking to people in Japan. He's too young to do everything we do, but we'll keep practicing with him," Ragdale said.
Colton got 93 percent of the test questions correct, which is impressive for most operators, but that score takes things to a new level when you're just a kindergartener.

"My friends can't believe I do radio. It took a lot of hard work," Colton said.

It's something Colton says he looks forward to doing every weekend. He does it as a hobby, but the biggest reason he said is "I really like to help people. I like it a lot." (KUSA-TV © 2015 Multimedia Holdings Corporation)