



CAARA Newsletter



CAPE ANN AMATEUR RADIO ASSOCIATION

APRIL 2017 EDITION

President's Desk

by Jon- K1TP



Another month comes and goes at CAARA but not without many activities and improvements around the club.

Stan and Hank attended workshops down at the ARRL headquarters to keep them abreast of what is going with ham radio, EmCom, and FCC legislation.

Ross- W1RAB and Jon-K1TP installed a five camera security system that was donated to the club. We now can watch mice in the kitchen in living color, frozen pipes burst, and equipment walk out the doors.

The newly regrouped Ebay committee consisting of Jake- W1LDL and Chris - K1TAT have been busy selling excess donated gear to bolster our club bank account.

Jake- W1LDL has come up with the idea of a club lunch or dinner in May and I will assist him. This will be a fundraiser for the club and a time to enjoy membership and club building. I hope you can make it to this event.

It is with great relief that we know have a Field Day Chairperson- Tony-AB1XK. Tony has been involved in ham radio for many years and will do a great job. He of course will need many to help out in planning food, logistics, etc. This is a fun event with plenty of time to get on a radio as well as enjoy the grilled food and desserts. The May member meeting will be used to organize this event.

As for me, I am in Venice, Florida for 6 weeks enjoying the weather and getting recharged for Field Day, Nearfest, camping, and assorted club activities. The funny thing is I looked up repeaters in the Venice area and what do I find but a local repeater on 145.130. There are a ton of repeaters in Florida on 440 that I will try, especially a few Fu-

sion repeaters I can try out with my Yaesu FT2D digital walkie.

I did not bring any HF gear because the condo association would not appreciate it. I am hoping to find a few ham flea markets and a local club to visit.

We have signed the papers needed to accept the grant money to reshingle the building and have been in touch with the contractors who will complete the work. We are just waiting for the go ahead and the funds from the city.

If you have recently retired or have otherwise freed up some of your time, consider helping out around the club. Send me an email if you are interested, we could use the help.

I have been asked to setup a ham radio station in June on a Friday night and Saturday morning to show the Rockport Cub Scouts a thing or two about ham radio. They will be camping out on the top of Summit Avenue, one of the highest elevations in town. Ross, Dean, Jake, Gardi, Rick, and I have operated from here in the past. I will send out dates and times as we approach June and you are all welcome to stop by and say hello.

Have you tried the 443.700 repeater since we raised the power to 80 watts? Have you ever tried our repeater on 224.900? Give them a try, 73.....

APRIL 12 MEMBER MEETING features well know artist/ writer/photographer Les Bartlett speaking on the quarrying industry on Cape Ann.

Information Desk

by Dean-KB1PGH



Since we are now turning to April on the calendar and spring is in the air it is now time to start operating HF portable. Now if you have never done that before I thought I would put out a few pointers for all the newbies out there. For this months column I will cover portable power for your HF rig. Since most smaller rigs are DC powered how would you like to power your rig? You can either do battery power or generator power. For battery power for a 100 watts rig please think about getting a Group 24 110 amp hour deep



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

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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 cell 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 is now on the cell tower in the Blackburn Industrial Complex with greatly enhanced performance.

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



cycle marine battery. You can either get a lead acid one for around \$125 or if you want you can get an AGM or (Absorbable glass mat) for double the price. The AGM's are safer but I have never had a problem with the lead acid batteries leaking or spilling. Please buy a deep cycle battery as they will hold a charge longer since the drain slower. Of course if you have a QRP or low power rig a much smaller sized battery will do. I buy the Exide brand of lead acid batteries and I have never had an issue. Just make sure that you buy a maintenance float charger to keep it charged at all times in between usage. Do not use an old type trickle charger as it will over charge the battery and please make sure you check the fluid levels in the lead acid cells at least once a month because the water inside the battery does evaporate. If you buy a battery you will also have to purchase a Battery Booster". What happens is when you operate your HF rig draws current. Your rig wants to see 13.8 volts but your battery drains during use and the batteries voltage drops below 13.8 volts thus affecting your rigs ability to operate and your HF will eventually shut down if the voltage level drops to 12 or 11 volts. A battery booster keeps the voltage at 13.8 volts so your HF rig can operate without affecting performance. I have the MFJ 4416 battery booster and it works great. A couple other items that you might want to get is a Anderson powerpole connector to your battery and a rigrunner which is a DC distribution panel for anderson powerpoles. If you buys a big group 24 110 amp hour battery they are heavy, over 60

pounds. I found a collapsible small dolly that I carry the battery around in. You can go deep and get a portable

solar panel charging system for your battery as well if you want. If you have some money to spend you can fund some lithium ion batteries out there for portable HF work as well. The benefits of battery power on HF is you don't get any birdies in your HF signal like you do with generator power and there is no ambient noise like you get with generators. You can also hook up two batteries together if you plan to run for 24 hrs like field day. Hope this information helps and next months I will talk about generator power for HF portable operations. For this months prepper tip, keeping with this months theme, do you have any back up power for yourself at all? Can you operate your HF, VHF and UHF rig at home with no power? You can either go the battery or generator route, or maybe both? Maybe something to think about? Until next month 73, Dean KB1PGH

From ARRL News:

International Crystal Manufacturing ([ICM](#)) of Oklahoma City has announced that it will be going out of business, probably at the end of May. Royden Freeland Jr., son of the company's founder, posted a letter this week on the ICM website.

"We will be honoring all orders that we have already taken and will be able to fill a limited amount of new orders dependent upon raw materials available," Freeland said. "We would like to thank you for your past

business. The success of ICM over the previous 66 years has been largely due to its amazing customer base."

International Crystal produces RF control devices — quartz crystals, oscillators, QCM crystals, filters, TCXOs/VCTCXOs, and precision crystals.

Royden R. Freeland Sr. founded International Crystal in 1950, at first operating out of his garage. One of his first contracts was to produce crystals for Collins Radio. The elder Freeland and his wife died in a 1978 air crash, and his son took over the company, which expanded into the production of other electronics in the 1980s.

In the 1990s, though, it sold off some of its equipment and distribution business to concentrate on its core enterprise — the manufacture of crystal and oscillator products.

The announcement caught some manufacturers off guard, and they are seeking to source the products they had been buying from ICM, one of the few remaining US-based

manufacturer of crystal products. Radio amateurs requiring crystals for projects or as replacement

parts for older equipment also will have to look elsewhere.

Ironically, International boasts on its website that it's "a proud supplier to RadioShack," which, for the second time in 2 years, declared Chapter 11 bankruptcy this week.



WHAT'S GOING ON AT CAARA?



DAVE - KD1NA



The March Member meeting featured Dave Robinson- KD1NA and his experience with the Elecraft line of ham equipment. Dave has been such a fan of this gear, you can see him at the Boxboro ARRL event working at the Elecraft Booth answering questions. He acts as an ambassador for the gear much like TenTec used to do years ago. What better advertising for a company than having an avid user of their equipment answering questions for potential buyers?

Dave has built all his equipment, as most do from this company. It is available factory built but what fun is that and what better way to know what is under the hood than putting it together.



Dave brought along a slide show of pictures showing the inside of the gear and pointing out and explaining each section. Elecraft is rated among the best of the receivers by Sherwood Engineering who independently rates all the major ham gear. Look them up online before you buy a new radio.



Ultra-Compact Home/Portable/ Mobile Station

The revolutionary Elecraft KX3 puts the world in the palm of your hand! Despite its small size, it covers all amateur bands from 160-6 meters, operates in all modes, and has DSP-based features usually found only on larger radios.

The KX3's unique form-factor allows you to operate from anywhere. Fold out the rear tilt-feet for use on a desktop or picnic table. For extreme portability, you can add the internal wide-range ATU, 8-

AA cell battery pack with NiMH charger, and adjustable KXPD3 keyer paddle. With a whip antenna, you can even operate hand-held.

In receive mode, current drain can be as low as 150 mA - about one-half to one-third that of competing all-band portables. Transmit efficiency is also excellent, further improving battery life.

K3S Transceiver



Both 100-watt and 10-watt (upgradeable) models are available. No-soldering kit; also available fully assembled and tested, the K3S is comparable in both features and performance to transceivers listing at up to six times its price.

In a first for the industry, the K3S's identical main receiver and subreceiver each feature a high-dynamic-range,

down-conversion analog architecture. This allows Elecraft to provide roofing filters with bandwidths as narrow as 200 Hz, while up-conversion designs have roofing filters typically 3,000 to 15,000 Hz in width. Unlike some competing down-conversion designs, the K3S also provides 6-meter coverage, as well as continuous tuning from 0.5 to 30 MHz. Each receiver has its own bus-switching mixer, narrow ham-band front-end filters, 32-bit I.F. DSP, low-noise synthesizer, and up to five crystal roofing filters.

The K3S is the only deluxe transceiver that is targeted at both home *and* field use. Weighing just 8 pounds and having dimensions of 4" x 10" x 10" HWD (10 x 25 x 25 cm), it's well-suited to demanding DXpedition or Field Day operations. Its receive-mode current drain of less than 1 amp greatly facilitates battery or solar-powered mobile/RV/marine installations. But unlike smaller portable transceivers, the K3's user interface is optimized for ease of use, and its feature set rivals units many times its size and weight.

The transceiver is offered both factory-assembled and as a modular, no-soldering kit.

Either way, K3S owners can start with a basic version of the transceiver, at lower cost, then easily add modules later, such as the internal subreceiver, ATU, and 100-W stage. To ensure identical performance of both pre-built units and modular kits, modules are 100% assembled and tested at the factory. Builders learn the radio theory behind each of the modules during assembly, and acquire skills that will enable them to easily add future modules or upgrades.

Two 32-bit digital signal processors provide true software-defined features, along with expansion memory to handle future signal processing tasks and operating modes.

The operator will have full control over any operating situation, with 8-band receive and transmit EQ, stereo speaker/soundcard outputs, binaural effects, and advanced noise reduction. Also included is built-in PSK31, CW, and TTY decode/encode, so the operator can enjoy the excitement of data communications with or without a computer. The rig's rich I/O complement includes an isolated sound card interface, front/rear mic/phone jacks, dedicated serial I/O, and band data. An optional module provides transverter in/out and RX antenna in/out jacks. The latter allow the use of RX-only, in-line filters for extreme operating environments.

Phones

by Curtis AA3JE

"ANOTHER ONE! I AM SO TIRED OF THIS! DO SOMETHING!"

SHE WHO MUST BE OBEYED, as you all know, is a warm, sweet, gentle person, except when her temper is aroused. The rest of the time she is loving and warm, and a joy to be around.

The problem is that her temper seems to be powered by the Energizer Bunny, **it** keeps going and going, and going..... The other behaviors rarely get a chance.

And she thinks I have magical powers, and am able to solve any problem, if she just repeats her concern louder, and shriller, and more often.

Bats fall out of the sky when she hits the high notes!

This time it was the phone. Again. Maddening.

When we all got cell phones, I put an answering machine on the house phone, to intercept the many, useful, unsolicited calls we receive.

"This is an important public service announcement about your electric bill...."
"This Windows Service department about Window's computer" (we don't have one)
"HI! I'm Bunny! You have won a FREE CRUISE!"
"This is Friends of the Muskrat! We will have a truck in your area....."
"Hello, this is the Disabled Gay Veterans association, we need your help....."
"Hello, this is Gary, from Mongolian Horse Rescue?....."

And many, many, many more. All equally important and deserving.

So I got her a cell phone. That worked for a while. Once a day, we dumped all the recorded calls off the answering machine on the home phone.

But then we had new problem. The slick artists began calling on the cell phone.

Now we have Apple phones, and iPads, and computers. So when a cell phone call comes in, the cell phone rings, the iPad rings, the Apple computer rings.....

PANDAPHONIUM!

So I end up trying to figure out which device is which, and where the stupid thing is.

Now when I answer? No problem. Answer, say something rude

(never say "Yes" in answering the phone anymore, or you will be signed up for "ENERGY PLANET" electricity service out of the Ukraine, they record your voice),

and then block the caller. It only helps a little, as they have a jillion phone lines.

But SHE WHO MUST BE OBEYED is insanely curious. It is built into the female chromosomes, can't change it, so she waits till I throttle the device, then asks,

"WHO WAS THAT?"

"Bunny, free cruise. Again."

"OH, THANKS."

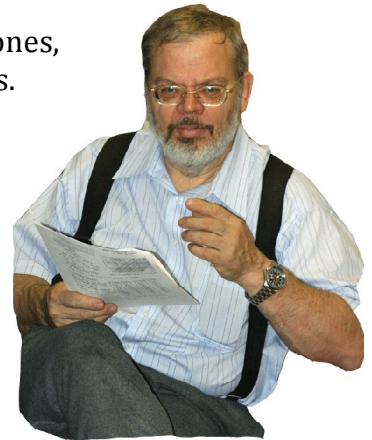
Eventually, tired beyond patience, I grumble.

"You might answer some of these."

"OH I COULDN'T!"

"Er, why not?"

"IT MIGHT BE MY BROTHER ASKING FOR MONEY AGAIN, OR SALLY, OR MY MOTHER, AND I DON'T



WANT TO SPEND ALL DAY ON THE PHONE.”

There is a million dollars, or more, waiting for someone who invents a phone gadget, that actually works, that can screen calls. We tried a few, but they all tended to block people we actually wanted to talk to (police, fire, pharmacy, amateur radio operators, alien spacecraft in Jupiter orbit).

Till then, It’s just me. Answering junk calls. I do have a strategy, though.

It seems to work.

My Korean studies have advanced so I know how to say, “Hello”, “I don’t understand” and “Do you speak Korean?” with a pretty good Seoul accent.

“ㄱㅇ, 1/4 1/4 ㄱㅏ?”

Er, is there anyone there who speaks English?

1«3/4 ㄹ? ㄱμ3/4 1, | ,» ㄱㅇ ㄱㅏ?

So far, it has worked flawlessly. They hang up right away.

3/4 ㄹ3 ㄱㅇ ÷ °; 1/4 1/4 ㄱㅏ!

FYI: THIS SIMPLE MOD WILL HAVE YOU CHANGING FREQUENCIES IN A JIFFY



COMING ATTRACTIONS:

APRIL 12, 2017

MEMBER MEETING



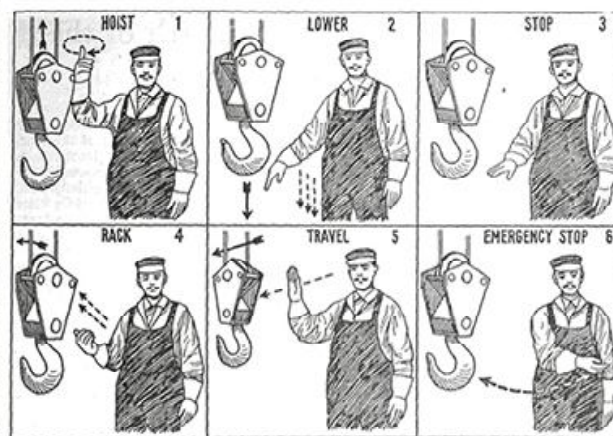
Talk by Les Bartlett

at CAARA,

6 Stanwood St. Gloucester. MA

April 12, 7:30 pm

**Communication & Safety
in the granite quarries
of Cape Ann**



SIGNALS FOR GUIDING THE CRANE

WOW this next members meeting will be the only presentation on quarrying and forms of communication used back in the days of quarrying here on Cape Ann by researcher, photographer, historian and well know speaker on the subject of Quarrying.

Les has had many one man shows on the North Shore and is known nationally for his photos of quarries. People of all walks of life and from around the world have purchased photos Les has done over his career here on Cape Ann. I asked Les to talk with us about quarrying and any communications that were used back in the active quarry days.

So plan on joining us for that meeting.

Ross Burton

ARISS Moves Closer to Launching New Radio System to Space Station

Amateur Radio on the International Space Station (ARISS) reports it has met a major milestone and now is “one giant step” closer to flying its new interoperable radio system to the International Space Station. Eventual plans call for installing a new JVC Kenwood TM-D710GA-based radio system on the station as part of an overall approach that will allow greater interoperability between the *Columbus* module and the Russian *Service Module*.

Lou McFadin, W5DID, and Kerry Banke, N6IZW, travelled to NASA Johnson Space Center (JSC) in Houston in mid-February for preliminary testing of Banke’s “breadboard” version of the ARISS multi-voltage power supply that’s essential to the upgrade. They worked with JSC engineers and Electromagnetic Compatibility (EMC) Lab personnel to put the specially built power supply through its paces, checking against US and Russian space specifications for preliminary power quality and EMC tests.

With positive test results in hand, ARISS now can move on to the next step — fabrication of prototype and flight units. The JSC engineers said the ARISS breadboard power supply was the first hardware to have passed all of the space agency’s tests and complimented the ARISS Team on its professional-level hardware development and design.

“I was looking to come away with what we needed to move forward,” said Banke. “We achieved that.” Banke also said he was impressed with the support he and McFadin received from the testing group. Key players on those teams, who are also radio amateurs, told him and McFadin that they find equipment supported by hams earns particularly good marks.

ARISS-International Chair Frank Bauer, KA3HDO, thanked Banke and McFadin for spending several days putting the unit through the rigorous battery of NASA and Russian preliminary electrical tests. McFadin credited the level of cooperation and experience within the ARISS Team for the multi-voltage power supply’s high marks.

Now that testing of the breadboard unit has been completed, McFadin can purchase the necessary — and

pricey — space-certified parts, to fabricate the final prototype and flight power supplies. He and Banke expressed confidence that the prototype and flight units will pass the even more rigorous final testing with flying colors.

The ARISS radio gear onboard the ISS is aging. A February supply vehicle carried a new Ericsson 2-meter handheld radio to replace one that failed a few months ago, disrupting ARISS activities. The VHF radio in the *Columbus* module was used for school group contacts and for Amateur Radio packet, which was temporarily shifted to UHF after the VHF radio failure. The newly arrived Ericsson radio will replace the Ericsson UHF radio supporting APRS packet and some school contacts, but Bower made it clear last month that the new Ericsson transceiver is an interim measure.

To help support final fabrication and flight tests of the ARISS interoperable radio system, **visit** the ARISS website. Contributions are tax deductible. Those contributing at least \$100 will receive an ARISS Challenge Coin.

Swedish Regulator Rejects Entry Level Amateur Radio License

Sweden’s telecommunications regulator PTS in February rejected the idea of an entry-level Amateur Radio license. According to Sweden’s International Amateur Radio Union (IARU) member society SSA, the PTS “categorically rejected” the proposal, and that SSA must now find new ways to motivate prospective radio amateurs.

“Amateur Radio’s future in Sweden is an urgent issue that will be discussed during the upcoming annual meeting on Faro,” SSA said. The SSA estimates that fewer than 100 new licensees are joining the Amateur Radio ranks in Sweden each year. The PTS took into account some comments on rules that SSA posted last fall.

In 2004 the PTS exempted Amateur Radio transmitters in Sweden from individual licensing. Since then the SSA has issued Amateur Radio certificates that include a call sign. SSA said PTS not only has ignored its views on call signs, it has added conditions that could render many well-established contesting call signs invalid.

ARRL Weighs In on New California 'Driving While

ARRL is recommending that Amateur Radio be specifically excluded from a California statute prohibiting the use of "wireless communication devices" while driving. ARRL Southwestern Division Vice Director Marty Woll, N6VI, is taking point on the effort to revise the statute, known by its legislative bill number [AB 1785](#). It was signed into law last September, and it took effect on January 1, amending §23123.5 of the state's Vehicle Code.

"ARRL has received a huge volume of inquiries and complaints about this statute in particular, since its enactment," ARRL General Counsel Chris Imlay, W3KD, wrote in a letter to Woll to provide guidance in amending the California statute. "I would urge that you present this letter at any meetings you have with California State legislators on this topic, thus to bring the issues contained herein to their attention." Imlay pointed out that the prior statute excluded Amateur Radio by definition. The new law, which completely replaced the earlier statute, never mentions Amateur Radio, but instead contains an open-ended definition of an "electronic wireless communications device," the operation of which while driving is prohibited. According to the statute, this "includes, but is not limited to, a broadband personal communication device, a specialized mobile radio device, a handheld device or laptop computer with mobile data access, a pager, or a two-way messaging device."

"Because of the 'not limited to' language, such a device is whatever

a law enforcement officer thinks might be included, and an Amateur Radio operator is not at all protected," Imlay wrote. Such a broad definition could stymie "even the most diligent law enforcement officers," who might interpret the new Vehicle Code language "more broadly than was intended."

Imlay noted that radio amateurs provide emergency and public service communications on a volunteer basis, and said the FCC encourages Amateur Radio licensees to assist during disasters and emergencies.

"Radio amateurs have regularly used mobile two-way radio systems for the past 70 years," Imlay said. "The ARRL is aware of no evidence that such operation contributes to driver inattention," he stressed. "Quite the contrary: Radio amateurs are public service-minded individuals who utilize their radio-equipped motor vehicles to assist others, and they are focused on driving in the execution of that function."

Imlay also cited a 2009 letter to ARRL from the National Safety Council stating that there was no evidence using Amateur Radio while driving is a significant risk, and that there is "a reasonable basis for excluding Amateur Radio communications from the prohibitions on mobile telephone operation and mobile text messaging while operating a motor vehicle."

Citing a 1994 Joint Resolution of Congress, Imlay pointed out that the policy of the United States is to encourage mobile Amateur Radio operation as a public benefit.

"Given the necessity of unrestricted mobile Amateur Radio communications in order for the benefits of Amateur Radio to the public to continue to be realized, ARRL urges California legislators to

reconsider and amend AB 1785, either to more narrowly define the class of devices included in the prohibition..." Imlay wrote. "Alternatively, a specific exemption for Amateur Radio operators would suffice..."

Teen Radio Amateur to Activate Iceland on his Inaugural DXpedition

Fourteen-year-old Mason Matrazzo, KM4SII, of Clemmons, North Carolina, will be on the air from Iceland as TF/KM4SII, March 13-19. Activity will be on 40, 20, and 17 meters, SSB only. Mason, who will be operating with a portable setup, is calling it his "Buddistick™ DXpedition to Iceland."

He said on his [TF/KM4SII page](#) on QRZ.com page that most operation will be from the village of Vík, at the southernmost tip of Iceland, although he anticipates possible operation from Iceland's capital, Reykjavik, "if I am able to find a location to set up the vertical." If he attracts a pileup, he may operate split.

"Even if I am very weak on your end, please try and give me a call anyway," he said. "I will probably hear you better than you can hear me."

Mason will operate under Icelandic rules, with local N-class restrictions, which offer access to HF, VHF, and UHF, but limit him to 100 W.

He will accept QSL cards to his home address and hopes to upload logs to Logbook of The World (LoTW) and ClubLog, and "maybe QRZ." He expects to have Internet/e-mail access while in Iceland and will post any updates to his [TF/KM4SII page](#) on QRZ.com

C.A.A.R.A. NEEDS BUBBLE WRAP AND RETURNABLE CANS AND BOTTLES

**PLEASE LOOK AROUND FOR
EXTRA BUBBLE WRAP AND RETURNABLE CANS AND
BOTTLES
THAT YOU WON'T BE USING**

**CAARA NEEDS BUBBLE WRAP TO
PACK UP ITEMS THAT CAARA SELLS
ON EBAY WHICH RAISES
FUNDS FOR CAARA**

**CAARA NEEDS YOUR EXTRA
RETURNABLE BOTTLES AND CANS
TO RAISE FUNDS FOR CAARA**

**YOU WILL BE HELPING CAARA
CONTINUE TO FLOURISH
AND GROW INTO THE FUTURE
BY BRINGING THESE WITH YOU
WHEN YOU VISIT CAARA**

**Thank you sincerely for your continued support of the club,
YOUR CLUB.**

AREA HAM NEWS AND EVENTS *by Bill WZ1L*

The Nashua Area Radio Club will be holding an Extra Class Study and Exam at the Dartmouth Hitchcock Nashua on the weekend of April 28, 29, and 30th. (Fri, Sat, Sun) The exam will be on Sunday 4/30 at the end.
Contact: Anita Keemerer, AB1QB (603) 321-6115 or email: ab1qb@arrl.net



Genesis ARS is conducting a General Class on May 13 and 20th. Class will be at the Plymouth Airport, Genesis ARS Meeting Room.
More info Contact: Chris N1IR email: chrisjohnson2003@gmail.com

MASS/RHODE ISLAND PHONE TRAFFIC NETS Tue, Thur and Sat 6pm 3.978 Mhz +/- Noise
All (Gen, Adv and Extra) are welcome regardless of whether you have traffic or not.

NORTH SHORE RADIO ASSOCIATION (NSRA) will be featuring Tom Gallagher, NY2RF, ARRL CEO as Guest Speaker at their April Meeting on Monday April 3rd (Note: This is a special meeting) @ 7:30pm at the Peabody Municipal Light Plant Auditorium, 201 Warren Street, Peabody, MA (Lowell Street)

NORTH SHORE RADIO ASSOCIATION (NSRA) will be featuring license exams this Saturday, March 25th at 12 Noon at the Danvers Fire Station, 64 High Street, Danvers MA. GPS N42 33.721 W70 55.958
Drivers license, Original and 1 copy of your License if upgrading and \$15.00 Test Fee required. Other information available at : <http://www.nsradio.org/>

FRAMINGHAM ARA FLEA MARKET - Sunday April 23rd at 9:00am
Cost: Admission: \$5.00 Tables: \$20 and \$25
More information at: <http://w1fy.org/flea.aspx>

MIDDLESEX ARC is attempting 10 Meters operations on or about 28.325 Mhz Thursday 7pm 2 meter Net is on 147.36 Echolink: W1LJO Node 462341
Want to know what else is going on around the area? Have you seen the EMA ARRL Activities Calendar? Pretty interesting.. Web: <http://ema.arrl.org/node/2131>

PUBLIC SERVICE OPPORTUNITY

Well it is that time of year again...

Public Service is almost here.. The first event is just a few short weeks away, and we CAARA and NSRA your next door club has a BIG List of events.. So Please visit the web site and sign up for any events that you want to and can.. The site sends emails to both the clubs Public Service Coordinators..

Please visit: <http://www.nsradio.org/events/index.htm>
And check it out.

Thanks,

North Shore Public Service Team





Tech in a Day at CAARA Clubhouse

We had 24 signed up, 12 came. One person from Rhode Island left quickly after 45 minutes because his wife got into a car accident.

EVERYONE passed, one person passed their General as well.

We got 5 new applications to be members. I tested the theory...I invited them to sign up online and no one volunteered. I printed out applications and seven asked for them, five filled them out passed them in. I will put them in the system. The other two said they think they will join and are planning on calling me to meet them at the club to train them and get on the air. Not bad, 50%.

Thank you Dean for your help, we got local folks to this one.

Rick WZ1B





photo by Tony- N1JEI

The beauty of holding the class at the radio club is that the participants have a chance to get on the air...true elmering! Whet their appetite and get them on the air and a chance to realize all the actual physical club has to offer in equipment. Participants are also handed an application for membership right on the spot. This session also donated 40 dollars to the treasury of CAARA. A win-win situation for the club!



photo by Tony- N1JEI

Save the Date for Field Day 2017

What is it?

Field Day is part educational event, part operating event, part public relations event – and ALL about FUN!



When?

Field Day is always the fourth full weekend of June, beginning at 1800 UTC Saturday and running through 2059 UTC Sunday. Field Day 2017 is June 24-25. (UTC is 4 Hours **Ahead** of EDT)

Objective?

To work as many stations as possible on any and all amateur bands (excluding the 60, 30, 17, and 12-meter bands) and to learn to operate in abnormal situations in less than optimal conditions. Field Day is open to all amateurs in the areas covered by the ARRL/RAC Field Organizations and countries within IARU Region 2. DX stations residing in other regions may be contacted for credit, but are not eligible to submit entries.

More to follow as we get closer to the Date.

Tony, AB1XK

CAARA Spring Emergency Communications Drill !

The CAARA Emergency Communications committee is planning a spring emergency communications drill. This drill will be held on Sunday, April 23rd starting at noontime and going throughout the afternoon. The drill will be held at Stage Fort Park in Gloucester Mass. This exercise is open to all club members and the main purpose is to give all club members the opportunity to get outside and operate their portable ham equipment. This is not an overplanned event and is for the sole purpose of having fun and getting on the air and making some contacts. You can show up whenever you want and operate however you want. Even if you don't operate portable you and want to learn how to there will be portable HF stations to study and learn from. Hope to see you there! If it rains we will reschedule for another weekend.



What is The New England Amateur Radio Festival (NEAR-Fest)?

The NEAR-Fest is an international event run by and for all radio hobbyists and enthusiasts, including “hams”, short-wave listeners, scanner buffs, vintage/antique radio fans, etc. NEAR-Fest is held twice annually, spring and fall, rain or shine, at the Deerfield Fairgrounds, Deerfield NH beginning on Friday at 0900 and ending Saturday at 1500 hours. May 5-6, 2017

Admission is \$10. Persons under 18 and over 80 are admitted free of charge upon presentation of government-issued ID. Inside parking is available for \$10 and includes a “reasonable amount of flea market selling space” for PRIVATE INDIVIDUALS selling their own personal property. Commercial vendors must register and pay applicable fees. If you are wondering if you are a “commercial vendor” you probably are. One complimentary inside commercial space is available for clubs, estates and other “non-profit organizations” on an “as available” basis.

Overnight camping, trailer and RV hookups are available. Three food vendors provide meals and snacks at reasonable prices. The Deerfield Community Church ladies serve up a breakfast that has to be consumed to be believed. Angelino's offers hamburgers, steak, sausage submarines and other great “fair food” specialties and Patty's Polish Lichen menu features wonderful “Mitteleuropa” cuisine. No one goes hungry at NEAR-Fest. We are extremely proud of the high quality of food that these vendors offer our guests while they are at the 'Fester.

NEAR-Fest typically attracts attendees from the six New England states, NY, NJ, PA, MD and other states as well as from Quebec, Ontario, New Brunswick and Nova Scotia in Canada. Some attendees travel great distances; one gentleman from Los Angeles has attended fifteen events and in 2010 one radio amateur traveled from Greece to join us for the fun.

The program of activities and events at NEAR-Fest is extensive; a huge outdoor electronic flea market, three buildings full of commercial vendors, forums, technical seminars and symposia, demonstrations, exhibits, displays, licensing examinations, special events radio stations, a “jam session”, good food, fellowship, fun and general mishigoss. NEAR-Fest is the largest event of its kind in the Northeast and has once been described as the “Woodstock of Amateur Radio”.

AM Rally on April 1-3 Weekend an Opportunity to Try a Vintage Mode

If you're not familiar with full-carrier amplitude modulation (AM) or have never used it on the air, you'll have a chance during the **AM Rally** during the April 1-2 weekend, on the bands between 160 and 10 meters (except 30, 17, and 12 meters) plus 6 meters.

Once the primary voice mode on the ham bands, AM eventually gave way to SSB, a form of AM. Yet AM has remained popular among dedicated radio amateurs who consider it their primary operating mode. Many modern transceivers include an AM button.

“Whether your rig is software defined, solid state, vacuum tube, hybrid, homebrew or broadcast surplus, you'll be a welcome part of the AM Rally,” said Clark Burgard, N1BCG, who is spearheading the event with Steve Cloutier, WA1QIX, and Brian Kress, KB3WV.

The AM Rally starts on Saturday, April 1 at 0000 UTC (Friday, March 31, in US time zones) and concludes at 0000 UTC on Monday, April 3. Certificates will be awarded to high-scoring stations in each of five power classes, both for most contacts and most states/provinces worked.

Amateur Radio Links Search for Amelia Earhart's Plane with ISS Crew, Classroom

One of the enduring mysteries of the 20th Century was the disappearance in 1937 of famed aviator Amelia Earhart and her flight companion and navigator Fred Noonan, while she was attempting to circle the globe. It appeared that Earhart's plane went down in the South Pacific, in the vicinity of Howland Island; her last-known radio transmission came from there. On February 18, a team from **Nauticos** — with stratospheric explorer Alan Eustace and aviation pioneer Elgen Long, WF7T — departed Honolulu for the vicinity of Howland Island, some 1,600 miles to the southwest, to complete the Eustace Earhart Discovery deep sea search for Earhart's lost Lockheed *Electra*. Nauticos provides ocean technology services to government, science and industry.

The team now is conducting a sonar survey of about 1,800 square miles of sea floor where it's believed the aircraft may rest, and Amateur Radio has provided a means to link the crew of the research vessel *Mermaid Vigilance* with youngsters following the expedition, as well as with the International Space Station (ISS) crew.

Among those involved in the Earhart search is ARRL Midwest Division Director Rod Blocksom, K0DAS, of Iowa. Earhart was born and raised in Kansas and lived in Iowa and Minnesota. Bryan McCoy, KA0YSQ, of Iowa, also is on the *Mermaid Vigilance*, which is carrying out the deep-water sonar search for the lost aircraft.

The team is using autonomous underwater technology provided by the **Woods Hole Oceanographic Institution** to image the ocean floor nearly 18,000 feet below. On March 17, the team launched the REMUS vehicle to search the depths of the Central Pacific.

FM Transmitter Finger Printing and how we can use it to track “kerchunkers” on the repeater.

Transmitter Hunting by FM Transmitter ‘Finger Printing’

By Sherlock W0RW

The signals intelligence method of ‘Finger Printing’ has been used for a long time and is very simple. It consists of an FM Receiver and a discriminator pick off that goes to an oscilloscope.

Here is how it works: When an FM transmitter is keyed up the radiated signal varies depending on what type of radio it is. An old crystal controlled radio will come right up on frequency with little overshoot deviation or drift.

There are not many of those on the air today.

All of the other newer radios use a PLL/VCO to generate the transmit frequency and when they start there can be positive or negative overshoot, sometimes up to 1 KHz. All this takes place within a few milliseconds so you don’t hear it but you can see it on a scope set to DC.

Some transmitters are so slow starting there is an audible click at the beginning of the transmission. The polarity and amplitude of the overshoot gives you the fingerprint of the transmitter. After the transmitter is on there can be additional drift depending on the length of the transmission. Of course if there is CTCSS/PL on the carrier that adds another fingerprint element. A storage oscilloscope is very helpful recording this data.

Some newer FM receivers use a FM demodulator chip which won’t allow you to have access to the discriminator but any older FM Radio will have access. Pin 4 on the meter socket of an old Motorola is the discriminator output.

Then you compare the ‘finger print’ to your history data base to identify the owner of a transmitter.

If you are unfamiliar with it you can read a paper on Finger Printing at:

<http://onlinelibrary.wiley.com/doi/10.1029/2000RS002345/pdf>.

The Federal Communications Commission is warning consumers about a new scam that is hooking consumers with just one word:

According to the FCC, the scam begins as soon as a person answers the phone. A recorded voice or an actual person asks: “Can you hear me?” And the consumer responds, “Yes.”

“The caller then records the consumer’s ‘Yes’ response and thus obtains a voice signature. This signature can later be used by the scammers to pretend to be the consumer and authorize fraudulent charges via telephone,” an FCC news release said.

Officials Warn Consumers About Phone Scam

“According to complaints the FCC has received and public news reports, the fraudulent callers impersonate representatives from organizations that provide a service and may be familiar to the person receiving the call, such as a mortgage lender or utility, to establish a legitimate reason for trying to reach the consumer,” the news release said.

Teresa Thomas, 49, of Minneapolis, Minnesota, said today that she’d received a similar phone call about a month ago.

“The person on the other line sounded like a young woman. She was giggling and she said: ‘Oh, I didn’t expect you to pick up! Can you hear me?’” Thomas said. “Which, of course, if someone asks if you can hear them, I said the logical thing and I said ‘Yes.’ And she proceeded to talk.”

Thomas said she soon realized that the caller was a recording, hung up the call and then blocked the phone number. The next day, she learned of the scam on social media.

The FCC advised consumers to immediately hang up if they receive this type of call. It also said that if consumers had responded “Yes” to a similar call in the past, they should keep an eye on all financial statements for any unauthorized charges.

Thomas said that she’d been checking her credit-card and bank accounts and had reported the incident to the FCC warns consumers about new ‘Yes’ phone scam (ABC News)

“I have not seen anything negative happen from that but it’s just good to be aware,” Thomas said.

The FCC also shared the following tips:

1. Don't answer calls from unknown numbers. Let them go to voicemail.
2. If you answer and the caller (often a recording) asks you to hit a button to stop receiving calls, just hang up. Scammers often use these tricks to identify, and then target, live respondents.
3. If you receive a scam call, write down the number and file a complaint with [the FCC](#) so we can help identify and take appropriate action to help consumers targeted by illegal callers.
4. Ask your phone service provider if it offers a robocall blocking service. If not, encourage your provider to offer one. You can also visit the FCC's website for information and resources on available robocall blocking tools to help reduce unwanted calls. Consider registering all of your telephone numbers in the [National Do Not Call Registry](#).

Equipment for Sale

Icom 7000 HF/VHF/UHF All Mode Transceiver	\$900.00
AB5N microphone modification	
MB-62 Mounting Bracket	
RMK7000 Remote Mount Kit	
LDG IT-100 Automatic Antenna Tuner 1.8-54 MHz	75.00
Samplex 1223 13.8 vdc 25 amp power supply	75.00
TAC-Comm TRC 1 Carrier	60.00

**[Available as a "package" w/ cables and
Anderson Powerpole connectors \$1,000.00]**

West Mountain DC-to-Go Battery Box	
w/RIGrunner & Super PWgate	175.00
DEKA 8G24M GEL Battery 74 A.H. @ 20 Hr.	125.00

[Battery Box and GEL Battery sold together for \$280.00]

Tigertronics Signal Link USB	75.00
Palstar AT1500DT 1500 watt Antenna Tuner	375.00
Buddipole Deluxe Package	275.00
Icom AT-180 Automatic Antenna Tuner	350.00
Astron RS-35M Power Supply with meter	100.00
Astron RS-7A Power Supply	15.00
Icom SM-50 Desk Microphone	100.00

[All of the above listed equipment is cosmetically perfect and has been lightly used. There are no known problems or issues with any item except the RS-35M where the meter lights do not work. Boxes and manuals are included.]

TW1020 portable antenna 5-Band Vertical Dipole with remote band switching control console,
40 meter band box, folding base, ground stake, and carry bag
275.00

[The TW2010 is noticeably weathered but works perfectly. The 40-meter band box, ground stake, and carry bag have never been used.]

All equipment is in Gloucester and available for inspection and purchase after April 4th.

EBay AUCTIONS *by Jake-WILDL and Chris- KITAT*



CAARA has been auctioning gear excess to our needs for the last few months. Above are a few donated items that have just been put on Ebay. A nice 2 meter transceiver with programming cable in excellent condition and a Yaesu FT-77 and matching antenna tuner that works pretty well but missing a knob. Go to the Ebay auction via the CAARA website and follow the action. We plan on selling over \$1500.00 worth of gear to bolster the treasury.

IMPORTANT NOTICE TO CLUB MEMBERS IN GOOD STANDING WHO ACCESS THE CLUB USING THE LOCKBOX ON THE FRONT OF THE BUILDING. THE CODE HAS BEEN CHANGED BUT WILL BE GIVEN TO YOU IMMEDIATELY UPON YOUR REQUEST.

The BOD decided to change the code on a yearly basis as our membership changes yearly and we felt the need to tighten up on security of the building.

I apologize to members who have shown up and have not been notified of the change. I did not know who had the codes and had no idea of who I needed to contact. Please accept my apology for the inconvenience, I accept full blame for this action.

Jon- K1TP