CAARA Newsletter

CAPE ANN AMATEUR RADIO ASSOCIATION JANUARY 2016

WINTER FIELD DAY AT THE CAARA CLUB FACILITY ON SATURDAY, JANUARY 30 FROM NOON UNTIL 8PM. Stop in and say hello, play with the radios and get a bite to eat.

Winter Field Day Association (WFDA) is a dedicated group of Amateur Radio Operators who believe that emergency communications in a winter environment is just as important as the preparations and practice that is done each summer but with some additional unique operational concerns.

We believe as do those entities of ARRL Organizations like ARES & RACES that maintaining your operational skills should not be limited to fair weather scenarios. The addition of a Winter Field Day will enhance those already important skills of those that who generously volunteer their time and equipment to these organizations. This is why WFDA is open to all licensed amateur radio operators worldwide.

Disasters are unpredictable by nature and can strike when you least expect them. WFDA's goal is to help enhance your skills and ready you for all environmental conditions found in the US and Canada during the spring, summer, fall, and winter.

Preparedness is the key to a professional and timely response during any event and this is what local and state authorities are expecting when they reach out to the emergency service groups that offer their services.

If you are serious about emergency communications as we are; we welcome you to join us for our yearly event. We are sure that you will find this event a pleasant change and challenge to that of a normal summer time field day.

Purpose: To encourage emergency operating preparedness in the winter.

When: The contest runs for 24 hours during the last full weekend in January each year from 1700 UTC (12:00 noon EST) Saturday to 1700 UTC (12:00 noon EST) Sunday. For 2016, the dates are January 30 and 31, 2016. Station set up may begin no earlier than 1300 UTC (8:00 AM EST) on January 30, 2016.

Bands: All bands, except 12, 17, 30 and 60 meters.

Modes: Any mode.

The **ARRL VHF contest** is also happening on the same day so you can try out the new beams on 2 and 6 meters and probably work a bunch of hams all over the place. We also have an all mode 440 radio with new antenna to give a workout!

Information Desk

by Dean-KB1PGH

As being your local ARRL Public Information Officer I though I would take the time to give you some thoughts and stats on just how much amateur radio clubs such as CAARA invest in communications equipment. Mostly I'm thinking of just the 2 main repeaters that CAARA owns so let's see how much private investment has been made in just the past few years from the amateur radio operators at CAARA. If we are just covering the VHF and UHF repeaters alone lets start here: The Kenwood 2 meter repeater cost around $1500, the Yaesu 440 repeater cost $500, the new VHF and UHF antennas cost around $1600 and to install then both in cost around $3200 and we now have a grand total of at least $6800 of investment and that doesn't even include the cost of the tuning cans and other items so lets say at least $7000 of private investment to keep and maintain quality 2 meter and 440 MHZ communications on Cape Ann and the North Shore. That's a lot of private investment by amateur radio operators to keep public service and back up emergency communications up and running. Now don't forget that we have also begun to improve the 220 MHZ communications as well by improving the antenna system so add on another $1500 for the 220 mhz repeater and another $150 for the new antenna the club just installed. Now we are up to over $8000.00 invested. Not to mention all of the

(cont. p 3)

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.

Jon Cunningham- K1TP Editor
Dean Burgess- KB1PGH Reporter

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

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

personal donated time by club members to oversee all this equipment which most of these improvements and investment have happened in just the past couple of years and the club is even looking to get another Yaesu repeater so it doesn't just end there. Now all of that money is only at the club level of private investment- just think of all of the personal money spent by all the club members on all their 2 meter and 440 MHZ home, portable and mobile rigs! The repeaters would be useless without all of us using our credit cards to buy all our own gear! But wait- there's more! Don't forget about all the money the club has spent on HF gear! CAARA has several thousand dollar rigs and beams and other antennas all bought with private club funds. So I think you may be getting my point by now. So if your discussing amateur radio public service or emergency communications with a non ham at least now you have some information to tell them about how much private and personal funds have been implemented to keep that infrastructure up and running 24 hrs a day. This discussion also goes to pointing out about how your dues and donations go to work each year to keep these frequencies that the FCC has granted us for free. Just remember that private businesses and corporations pay dearly for access to the same frequencies and you only paid $15.00 to have access to them when you passed your ham license exam! One more item to cover is winter field day. The annual winter field day event will be held on January 30 through the 31 st 2016 starting at 1700z or our local noontime.You can find out more about winter field day at www.winterfieldday.com . For the prepper tip of the month it is January so now's the time to go through your disaster kits and supplies to see if anything such as your emergency food,water or medicine has expried. Now's the time to check all your flashlights and if need be throw new ones in as well.It's easy just to check your supplies every 6 months-once on January 1st and on July 1st. Just note it on your smartphone calendar or home computer.
See you next month!

SURVEY SAYS:

The membership was solicited for input by a club survey. We had 69 respondents. A drawing was held and the winner is Anthony (Tony) Sarracino (AB1XK) of Andover.
Observations of recorded results of 69 respondents to the CAARA, December 2015 survey.

First pass we looked at the questions that are quantitative and the second group of questions were qualitative and or comments from the survey is. The committee members agreed that comments should stay as written and not attributable to the member who wrote it.
We then looked at any category of response in any of the quantitative questions that exceeded a statistical amount over 50% of the members or more we considered that as a clear message.
The survey committee has compiled the information and comments and has sent those documents to the board for review before sending to the club members.
Thank you all who took the time to fill them out.

Survey Committee
K1VRA
K1TP
WB1PGH
W1RAB

WHAT'S GOING ON AT THE CAARA EMCOM CENTER?

What is going on?

Well a lot is going on but you have to get to the clubhouse to see it.

Bill Canty, a regular on Tuesday afternoon club Open House has slowly but surely been repairing gear at the clubhouse and organizing the second floor. As you can in the above photo, things are looking really good.

Bill will be replacing the final transistors in two defective repeater amps in the coming sessions and I hope Dick-KR1G can make it up as well.

Ross- W1RAB, our energetic "get her done" guy has completed the emergency power system. The CAARA club can now be run 24 hours a day off a city gas powered generator that will heat both floors of the club, lights, and ham gear on the first floor.

Ross installed and wired an exterior box to plug in to the club generators. We have one 5K gasoline generator that was donated by Rick- WZ1B and also a 5K generaor that will run off city gas with the conversion kit installed by Ross.

Last Tuesday, Ross, Bill Canty, and Jon started up the city gas generator, tuned it, and plugged it in to the building. We ran the building on the generator for 30 minutes and it ran great.

Jon-K1TP added some shelving below the tube display on the first floor for displaying some vintage receivers.

Jon is going to build a shelving unit that will sit on top of the table Jake- W1LDL built. It will be built over at the Gloucester High School woodworking shop where his son works.

The second floor storage room is overflowing and it is going to be organized by Jon and Larry hopefully over Christmas vacation time.....would be nice to have some help if anyone is available. It is apparent we have more old stuff than we can or want to store.

We will be tossing things in the dump, if you want any of this stuff, come take it or forever hold your tongue. We are talking about old equipment and parts that we will never use in our lifetime, **IF YOU FEEL THIS STUFF HAS VALUE, TAKE IT HOME AND STORE IT AT YOUR HOUSE. FAIR WARNING TO ALL!**

We will now consider running an hf amplifier on one of the HF radios soon. Bill Canty has upgraded the antenna relay for switching the beam from the first to the second floor which was previously only rated at 100 watts. The club continues to improve by the month.

As a member since 1980, I can say that the last year has been the most explosive eraof improvements starting with the purchase of the building from the city to the building and equipment enhancements that have orchestrated by the hard work of a small core of CAARA members.

Thanks to Stan- W4HIX I can now operate from my laptop at my house and utilize the Flex radio and operate on 10-160 meters on many modes.

We are not done at the clubhouse, we still have a few projects to complete and welcome any able bodied ham to help us. We want to paint the first and second floor bathrooms as well as the stairway to the second floor.

We need to clean out and organize the basement. This will mean throwing things away by those cleaning out the basement. **WARNING: We will be throwing a lot of stuff out. If you feel it is still valuable, you may gladly take it home on a permanent loan. We are not a storage center and some stuff has to go.....**

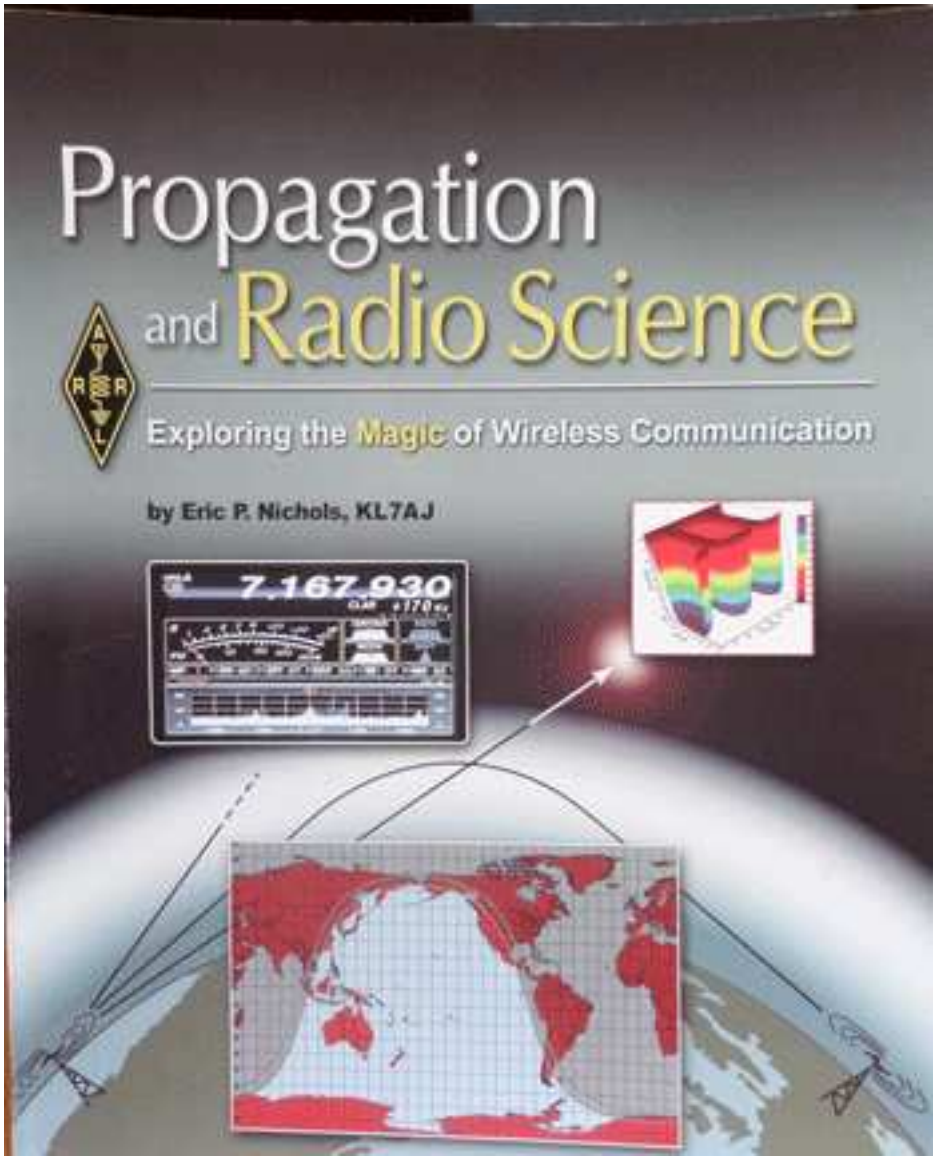
We are entertaining the idea of having the Christmas Party at the club next year on the night of the regular December Wednesday night meeting.

We are also leaning towards having Field Day next June at the CAARA clubhouse as well.....Comments? Late breaking news: the 220 repeater is now running 90 watts output! *Jon- K1TP*

ARRL Propagation Book

A review by Dean- KB1PGH

The most fascinating part of the amateur radio hobby for me has to the propagation of radio waves from transmitter to receiver.Of course it‘s just one thing just to know the basics about the ionosphere but I always loved the “Science” of it all the way down to the physics and molecular level of it all.To be quite honest if you can‘t appreciate all that goes on between your ham radio and anothers then I don‘t know what to tell you.Plus I‘ve always believed that any amateur radio operator should know the detailed operations of the ionosphere because is it not one of the main reasons why we got into this hobby in the first place.Well I just got done reading the new book from the ARRL called “Propagation and Radio Science” written by Eric Nichols KL7AJ and after I was done reading it my whole way of thinking of how radio waves interact with the ionosphere was changed.The book is 21 chapters long and covers such topics as free electron propagation to the reflection process and ground waves.It also covers the optical factor of radio waves and the magnetic personality of radio waves.To be quite honest this book really drives down to what is happening at the molecular level of a radio wave and the molecular levels of the ionosphere.This book does not just cover the basics of what a technician class operator may need to learn to pass the test but it may take a couple of reading for the information to really set into your noggin.For example Mr Nichols points out the misconception that radio waves just simply “Reflect” off the atmosphere.Really what is going on is that the radio wave that leaves your antenna actually is “Reradiated” by the electrons in the ionosphere such as the different colors you see in a rainbow.After you are done reading the book you‘ll be even more amazed at how everything has to fall into the exact right place in the ionosphere in order to make an HF radio contact.So winters here so you have plenty of time to read so if you want to be schooled about what you think you may know about the ionosphere please purchase this book.It will be time well spent.



CAARA CHRISTMAS PARTY

Galileo's dozen: 12 satellites now in orbit

The pace of deploying Europe's own satellite navigation system continued to increase with yesterday's launch of the latest pair of Galileo satellites, doubling the number of satellites in space within nine months.

Galileo 11 and 12 lifted off together at 11:51 GMT (12:51 CET, 08:51 local time) atop a Soyuz rocket from French Guiana.

This sixth Galileo launch was a textbook operation: all Soyuz stages performed as planned, culminating in the Fregat upper stage deploying the twin satellites into orbit close to 23 500 km altitude, around 3 hours and 48 minutes after liftoff.

"With today's launch, Europe has doubled the number of its Galileo satellites in orbit in just nine months," commented Jan Woerner, Director General of ESA.

"Along with the ground stations put in place around the globe, this brings Galileo's completion within reach.Initial Galileo services are scheduled to begin within next year, which proves the importance of this wise investment."

"The excellent performance of these satellites, as measured on the ground, allows Europe to join the club of the world wide providers of satellite navigation services," noted Didier Faivre, ESA's Director of Galileo and Navigation-related Activities.

"Production, testing and launch of the remaining satellites are now proceeding on a steady basis according to plan.

"Then, after the summer break in 2016, the tempo of deployment will increase further with the first of three customised Ariane 5 launchers that will carry four rather than two satellites into orbit each time."

This month will see the 10th anniversary of the launch of Europe's very first navigation satellite: GIOVE-A, on 28 December 2005. It secured the frequencies set aside for Galileo, gathered data on the medium-altitude orbit environment and flight-tested hardware for the working system

RADIO AMATEUR KILLED IN KABUL VIOLENCE

DON/ANCHOR: We begin this week's report with word that a ham from Spain has become a Silent Key, following a gun battle inside the Spanish Embassy in Kabul. Amateur Radio Newsline's Jeremy Boot, G4NJH, has the details:

[JEREMY]: Isidro Gabino San Martin Hernandez, EB1BT, from Leon, Spain, was working as part of the Spanish Embassy's security team in Kabul when he, another police officer, and numerous others on the diplomatic staff, were killed during an extended shootout inside the embassy early Friday evening, Dec. 11. The shootout closely followed the explosion of a car bomb, believed to have been set by Taliban suicide bombers, outside the Embassy's guest house gate. A group of gunmen then entered the embassy compound and a 9-hour gun battle ensued.

According to an account posted in The Spain Report, all the attackers were ultimately killed by the Afghan Police Special Forces.

A statement released by the Spanish Home Office said the Home Secretary had offered the King's and the Prime Minister's condolences to Gabino's widow and ordered Spanish flags flown at half-mast for three days on police buildings.

Hernandez, the father of four, was 48.

FLORIDA HAM AGREES TO PENALTY

In a consent decree with the FCC, Thomas J. Warren, K3TW, of Lecanto, Florida, has agreed to pay a $3,500 civil penalty for failing to identify while transmitting on 20 meters.

The consent decree, issued Dec. 9, says in part: QUOTE "In response to complaints that an unidentified station was transmitting on an Amateur Radio frequency at 14 MHz, FCC agents determined that the transmissions were coming from Mr Warren's residence. To settle this matter, Mr. Warren admits that he failed to transmit his assigned call sign, violated the Commission's rules, will report any noncompliance with rules governing the Amateur Radio Service, and will pay a $3500 civil penalty."

The decree traces the case back to June 25 of this year, when, the agency says, Warren acknowledges he may have failed to transmit his station identification as required. The decree went on to say that Warren's transmissions QUOTE "related to an ongoing dispute with another amateur radio operator, whose intentional interference had allegedly disrupted communications on the American Foreign Service Net that operates weekly on 14.316 MHz."ENDQUOTE

With the issuance of the decree, the agency has concluded its investigation of Warren.
(ARRL, FCC)

HELPING BRACE UP SOUTH BENGAL

A team of radio amateurs from Chennai, Bangalore and Kerala are traveling to south Bengal to assess the communications infrastructure and other assets that would help the state brace for any disaster such as the cyclone that struck in May 2009.

The hams' main challenge is to study what kind of shelter is available in the region, the state's disaster-management plan if any, and the feasibility of creating a series of amateur radio communication bases. The hams will take into account the area's access to the Internet, even in remote areas.
(HINDUSTAN TIMES)

TACKLING THE PHILIPPINES' TYPHOON

A weather disaster in another part of the world - the Philippines - had ham radio operators mobilizing well before it made landfall. And then, as Typhoon Melor approached, the Philippine Amateur Radio Association activated its Ham Emergency Radio Operations, or HERO.

By the time it hit on Monday, Dec. 14, the typhoon swept through the central part of the nation, cutting power for millions and leaving at least six dead, one of them a child.

The Philippine government reported that more than 90,000 homes were damaged, at least 8,000 beyond repair. In addition, mudslides and landslides left roads blocked.

HERO has been making use of 7.095 MHz, lower side band, as its calling frequency for emergency traffic, requesting that all amateurs keep the frequency clear. The hams are utilizing backup power, and plan to continue operations as the typhoon makes landfall throughout the archipelago.
(CHANNEL NEWS ASIA, SOUTHGATE AMATEUR RADIO NEWS, WEATHER.COM)

FCC WEBSITE UPGRADE

For ham radio operators, not every long-awaited launch necessarily involves a CubeSat. On Dec. 9, the FCC set course on a new trajectory with a website designed for improved access and navigation. A statement from the Commission describes the new website as featuring QUOTE “a more responsive design, a new site navigation structure, and an improved search capability.” ENDQUOTE

The site also provides a friendlier interface for display on mobile devices, tablets and other platforms beyond the desktop environment. The site includes some big plusses for hams: There is now the ability to link hams directly to the Universal Licensing System from the homepage, and also access a direct link to the Electronic Comment Filing system, which is used for input in official proceedings.

Project Manager Deanna Stephens also notes, in an agency blog online, that the site’s ability to offer navigation by toggling permits browsing by Categories or by Bureau and Office — hopefully providing more responsiveness to user preferences.
(ARRL, FCC)

QUARTZFEST BRINGS A DESERT TO LIFE

The gathering bills itself as the ultimate in “hands-on for hams.” And it’s taking place in the middle of nowhere....well, almost. It’s the annual Quartzfest meetup just outside Quartzsite, Arizona. From Jan. 17 through 23. Quartzfest brings life, activity and good QSOs to a remote publicly owned campsite in the Sonoran desert.

In addition to giving attendees a chance to preview the latest advances in radio technology, organizers of this free specialty convention will also be conducting classes in radio theory and other ham-related interests. With star-gazing, cooking classes, campfires and children’s programs listed as some of the many other non-radioactivities, Quartzfest is not the typical hamfest. It grew out of years of informal meetings that began in 1995 among ham radio operators who were also RV enthusiasts.

And then, it just grew from there. The hands-on classes are part of the educational focus at Quartzfest, and workshops include everything from global positioning, to portable antennas, to PSK.

Visit the website, quartzfest.org to see the complete program schedule.
(QUARTZFEST.ORG)

KOSOVO AMATEURS JOIN IARU

Hopes were on-again, off-again, on-again for quite some time among radio amateurs in Kosovo, but the wait is over: It’s on-again! The Kosovo Amateur Radio Association, also known by the initials SHRAK, is now part of the International Amateur Radio Union, following a second vote by its member societies.

Kosovo, formerly known as Yugoslavia, had been a candidate for membership as early as 2014, but failed to gain admission after the sufficient number of votes did not materialize before balloting deadline. The IARU’s

Region 1 then requested a revote, which has since taken place, admitting the nation into the union.

Meanwhile, the Kosovo amateurs will be on the air through the end of this year as Special Event Station Z60IARU, commemorating the International Amateur Radio Union's 90th anniversary — and they'll be doing it as as an official member of the union, at long last.
(ARRL)

KEYING IN ON FOR ROOKIE ROUNDUP

Think of it as Straight Talk for Straight Keys: The ARRL's Rookie Roundup will be held Sunday, Dec. 20 and everyone who wants to get their Code in shape - or perhaps up to a greater speed - is encouraged to jump in. Anyone licensed for three years or less qualifies as a Rookie and can get on the air calling CQ RR. More seasoned amateurs are encouraged to call CQ R, for CQ-Rookies, and go in search of newcomers.

The ARRL is also hoping that veteran operators will let new amateurs give CW a try at their stations or perhaps assemble a group of newbies at their shack for a multi-op.

Practice now - Straight Key Night is coming too, on New Year's Eve.
(ARRL)

PEOPLE IN THE NEWS: ALEX SHOVKOPLYAS

Speaking of Morse Code, Radio Amateurs of Canada has presented its Amateur of the Year award to Alex Shovkoplyas, VE3NEA, the developer of the free software program known as CW Skimmer.

According to various reports, the honor is being given to the Ontario resident for QUOTE "outstanding and consistent contribution to the welfare of amateur radio" ENDQUOTE Although various news reports list the honor as being given this past fall, there is no official statement, or press release, on the Radio Amateurs of Canada website.

The award is being given for the year 2014. CW Skimmer is a contesting tool that interprets call signs sent in CW over a wide receiver bandwidth and also identifies waterfall traces by call sign. Once extracted, the call signs can be exported for DX spotting.
(ARRL)

TRANSMITTING SPIRIT ON CHRISTMAS EVE DAY

Two unique transmitters — the first, a vintage one, the second, an experimental one — are delivering a Christmas Eve message this year, so listen up:

The Alexanderson Transmitter in Sweden is more than 90 years old. But the tradition it inspired is perhaps 10 years old. Developed by Swedish engineer and radio pioneer Ernst Alexanderson, a General Electric employee in Schenectady, New York, the vintage transmitter will be tuned up and transmitting on Christmas Eve, sending its holiday message in CW on the VLF frequency of 17.2 kHz from Grimeton Radio/SAQ in Sweden.

The Alexanderson transmitter's tuneup will begin at 0730 UTC. The event will also be webcast live on the webpage www.alexander.n.se - where information about listener reports can also be found.

Once used regularly in transatlantic communications, the Alexanderson transmitter is now a treasured museum piece. And it is put into action only on special occasions - such as this one.

It’s a special occasion too for Brian Justin, WA1ZMS, who is pressing his 600-meter Experimental Station WG2XFQ into service as well on Christmas Eve. The 486 kHz transmission from Forest, Virginia, set to begin at 0001 UTC, honors the 109th anniversary of Reginald Fessenden’s first audio transmission. The commemorative transmission will continue for 24 hours and, according to Justin, will be repeated on New Year’s Eve and New Year’s Day.

Such operations are a specialty for Justin, whose transmissions coincide with - and honor - important dates in the history of wireless communications.

Send listener reports to Justin at his QRZ.com address.

OHIO HAMS HELP NEEDY FAMILIES

Another holiday transmission, this one of hope and caring, comes to us from Ohio. The Center of Hope in Ravenna, Ohio, has a special Santa in the form of the Portage County Amateur Radio Service. The group’s president, Rick Kruis, K8CAV, and vice president, Jim Wilson, AC8NT, recently donated a check for nearly $4,000 to the Center, which provides free hot meals 5 days a week for 75 to 100 low-income residents in the area. The Center’s work is especially important in areas where no food pantries exist.

The check was accepted by Mark Frisone, chief executive officer of Family & Community Services Inc. He said: QUOTE “This is truly a clear example of the impact that the Center has on our community,” ENDQUOTE

The Portage County group is an ARRL-affiliated special service club.
(ARRL)

MERRY CHRISTMAS de SANTA

The spirit of Santa is everywhere. And just in case you missed a QSO with the guy in the red suit, there’s still time. As expected, Santa’s on the move - and he’s even DXing.

For the 30th consecutive year, you can talk to Santa, OF9X - Old Father Nine Christmas- as he travels from the Arctic Circle westward toward the U.S. The station OF9X is active now through Dec. 28 on all bands, including 472 kHz. The Radio Club of Arctic Circle, OH9AB, and the Radio Club of Pusula, OH9W, with support from Radio Arcala, OH8X. There is also an opportunity for contact with OH9SCL in Finland. QSLs should be sent to either OH2BH or via the ClubLog at OF9X.

Closer to home in the U.S. is the Santa Claus Net on Dec. 23 and Dec. 24. The Net will be on 14.305 to 14.325, sponsored by the 14.300 Net, from 1400 to 2000 Eastern Time. Check with the Maritime Mobile Service Net on 14.300 MHz for the actual operating frequency for Santa or perhaps Mrs. Claus. Or if you’re looking to volunteer to be an on-air Santa, send an email to Bob at cpalawyer@att.net

The DoDropInn EchoLink Conference Server, Christmas Eve Santa Watch Net that starts at 1800 hrs eastern time. Dave N3NTV will be calling the net and keeping track of Santa’s location. Like last year, Santa has a radio in his sleigh and may chat with the kids again. Once again, Santa Watch on Christmas Eve at 1800 hrs eastern on the *DoDropIn* Echolink conference server #355800.

And then there’s the Santa Net on 3916, which took to the air right after Thanksgiving and continues through Dec. 24. Check it out at 7:30 p.m. Central Time, nightly.

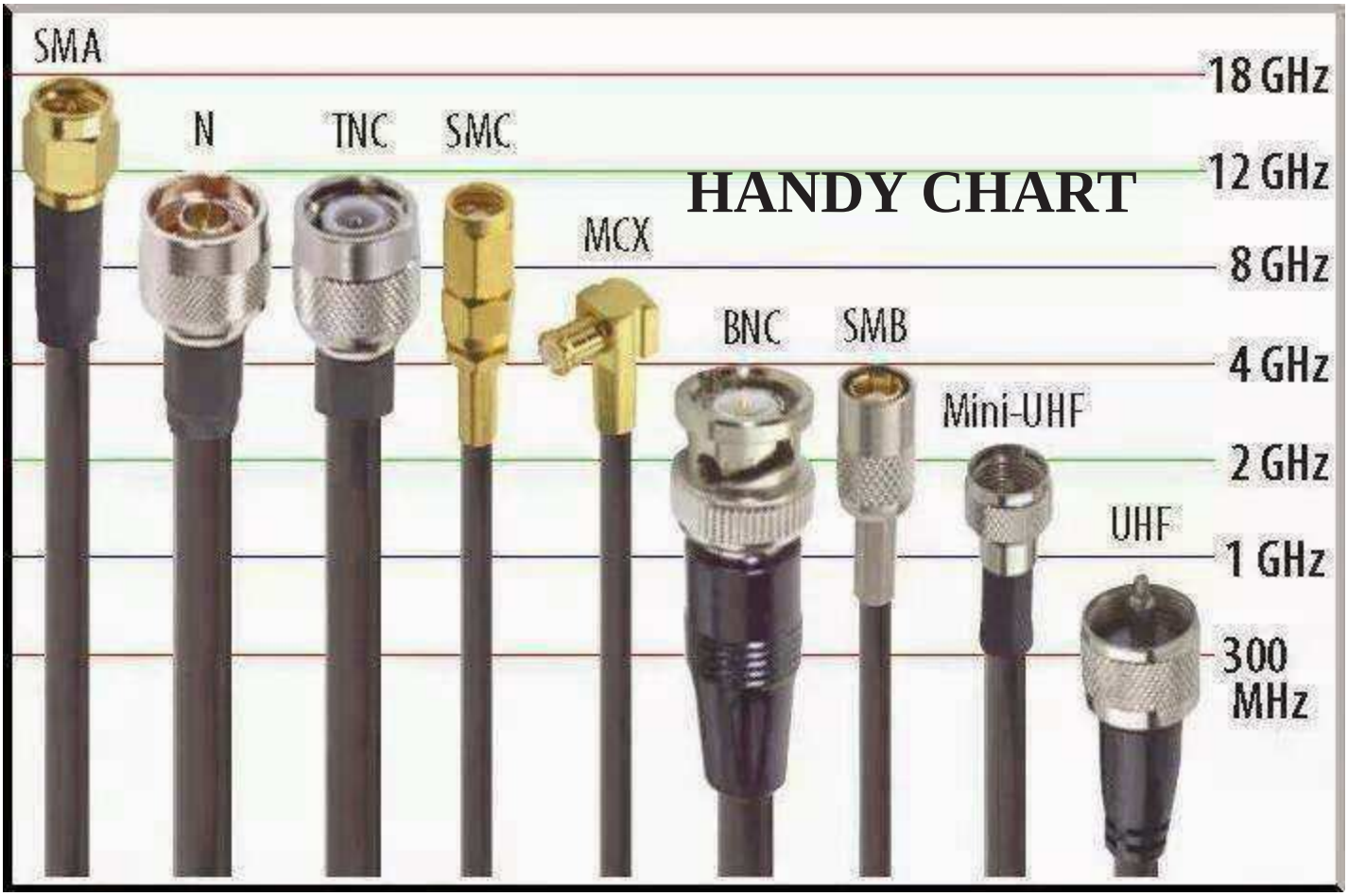


Chart above is handy to check out and make sure you have the right connector for the frequency you are using.

Photo on the left: Happy Birthday to Bob Quinn- WV1A who has been a big part of CAARA as far back as I can remember. Bob coordinates the VEC sessions given at CAARA on a monthly basis and now at the Annual Boxboro Hamfest.

Bob is always handy when we need something fixed or fabricated. Recently he drilled the holes in our antenna patch panel and mounted the new front railing to the concrete.

Thanks also goes to Dave Linsky-KA1LKX who fabricated the front railing at his workshop and donated it to the club.

Christmas Joy

by Curtis- AA3JE

I put my foot down, (carefully) this Christmas.

She Who Must Be Obeyed has had a knee replacement. It has gone well, and aside from her stumping around like Captain Ahab on the Pequod (she needs the other knee done too), she is a happy camper.

I am, unfortunately, not. Her new knee means she has been able to go through the house and identify all the deficiencies (many) in my housekeeping. And cooking. And operation of the galley. And in laundry services, and plant care, and gear stowage……

So when it came to planning Christmas, this year, I put my foot down!

NO BIG CHRISTMAS! NO BIG MEAL! NO TREE! NO DECORATIONS!

"YOU NEED DO NOTHING! I CAN DO IT ALL!" she said.

"I am not so sure……." I said.

"YOU MAY RELY ON ME!" she said.

And so, at C-14, I drove her to the tree place. And she did select a tree.

AFTER I WALKED OVER HALF THE LOT AND PULLED OUT 30 OR SO FOR HER TO LOOK AT.

And so, at C-12, I drove her to some BIG BOX store, pushed the cart, loaded the car, unloaded the car, dragged it upstairs, and put it away.

It was not going so well.

I will skip over setting up the tree on C-10.

(Note to self: brushing the window with the butt of the tree is like gently touching the guard rail with your car's fender. Quite expensive, and lots of broken glass.)

I will skip the 14 heavy boxes of ornaments brought up from the basement on C-9.

I will absolutely skip the problem of unbalanced boxes on the top shelf of the closet (I will heal in time and the bill from AGH was quite reasonable on C-8).

I will skip the tree watering problem (C-7). (The training I received with the Marine Combat Engineers on crawling under barbed wire was very helpful here).

I will skip the lights (C-6) (amazing how such knots can form in one year).

And of course, the boxes have to go down (C-4) (out of sight) and then come back up C+1 (after Christmas) and go down again on C+2 .

And I am beginning to become a pretty good sou-chef (low ranking toad that prepares onions, potatoes, and greens for the master chef) C-3.

One special Swedish dish requires peeling and grating 20 pounds of potatoes, but I have been tested, and am HIV and Hepatitis B & C negative! So the bleeding was no problem!

The dishes (special Christmas dishes) were a bit of a problem. But I found them all from the written descriptions on C-2. They were right behind the boxes of winter clothes and in front of the boxes of summer clothes. These all do not fit anymore, but hope springs eternal in She Who Must Be Obeyed.

And of course, the ONE present for an obscure relative (C-1) got mixed in the general pile. But was easily found after an hour of searching.

And I will omit the smoke detector problem (C0), (Note to self: the damn things are useless, they go off for the tiniest of fires!)

But I have to admit, she was right, I didn't have to do a thing!

Happy Holidays, everyone!

I'm checking into the Holiday Inn.

CAARA's Wealth of Opportunities

Stan, W4HIX

CAARA now owns the building at 6 Stanwood Street. This fact, along with much planning and hard work, plus a wealth of very good radios, tuners and antennas has combined to create an amazing environment for radio work. If you are interested in learning, experimenting, teaching, operating, contesting or repairing radio gear, you would be hard pressed to find a better place to do it.

I'd like to thank Gardi for opening the club on Tuesdays—this was a great idea and I know a big commitment on his part to be there every Tuesday. There is a lot of activity on Tuesdays. This opening allows members to access the bounty of equipment that is set up and available for operating.

CAARA has seven operating stations that are fully functional. Almost all of these stations can be computer controlled. The computer control also allows computer logging of QSOs with N1MM+, the same system that is used for multi-station logging on Field Day.

Thanks to Jon K1TP, we now have a very rational antenna patch panel that makes it easy to switch antennas. An automatic tuner has been added and is integrated into the patch panel and is currently attached to the G5RV Jr, so it operates down to 80m. This tuner can also be easily patched into the end-fed wire antenna with good results.

The seven stations represent some of the most popular radios produced, from all-in-one super portables like the Icom IC-706MkIIG and its successor, the IC-7000, to the venerable Yaesu FT-897D. A donation of a Yaesu FT-1000MP gave us a classic high quality late 1990s desktop transceiver with desk microphone and speaker. There are lots of knobs on the FT-1000 and no menus. We also have a Ten-Tec in the Vintage Room for those of you who want to go old school. Rounding out the radios is a FLEX-3000, a software defined radio with no knobs, completely computer controlled. This is not the latest, but still one of the best radios available. Another great radio is the Yaesu FT-920 that is downstairs. Another radio with lots of knobs so you're not trying search menus to adjust the RF gain or output power. Want to work HF? This is a very good place to start.

We have four primary HF antennas—a tri-band beam (Cushcraft A3 - 10, 15, 20m) with rotor, an R4 vertical, a 125' end-fed wire and a G5RV Jr. The beam has great coverage and I've run some propagation studies showing it works pretty much around the world with good conditions. The R4 is not a bad performer. The end-fed wire covers the bands, down to 75/80m and 160m and works well with Winlink RMS stations. The G5RV Jr. looks like it has a fairly high takeoff angle, with good coverage east of the Mississippi and into Europe.

Jon K1TP got the end-fed antenna up across our

YAESU FT-1000 HF RADIO

neighbor's back yard. CAARA has always been constrained because of our lot size, so good relations with at least one of our neighbors has some real benefits for our operating capabilities.

Note that almost all of the stations at CAARA form the basis for our Field Day operations. This is not a coincidence. The SSB, Digital, CW, VHF and GOTA stations are all set up for members to use and learn on all year long. The FLEX has been configured as a backup radio for Field Day and has recently integrated third party software for digital modes (HRD DM780, fldigi and Winlink 2K).

Almost all of the radios are computer controlled. IBM T-43 laptops running Windows 7 have CAT connections to the radios. The FLEX has a more modern Dell Latitude 4300 laptop, which runs the PowerSDR software for control of the FLEX-3000 and now the third party software as well. These computers are the basis of our Field Day logging system. Computer logging is vital to contest operations—just try scoring a multi-op contest with paper log sheets sometime, it isn't a fun way to spend a weekend.

The computers are networked and synchronize QSO logging from all stations. A single point failure does not affect the system. To add to the learning experience, an HSMM mesh networking system has been added. There is no single router in the system—a mesh network is established automatically, so again, a single point failure does not affect the system. What has this got to do with ham radio you ask? Half of the 2.4 GHz WiFi band is a ham band! Yes HSMM is ham radio. The HSMM network is established at CAARA as the main network for the stations.

What has not been mentioned here is the new tower (Tower 2) that has recently been put up. This tower is dedicated to VHF operations, with a 6m Yagi, a 2m Yagi and a 2m/440MHz vertical. The rotor from Tower 1 was moved to this tower and a brand new computer controllable rotor has been installed on Tower 1. In the process, Tower 1 was cleaned up a bit and a high quality weather station added to it (now online).

All of the laptops run TeamViewer—a screen-sharing program. This allows remote access to the laptops for many purposes, including maintenance, updating and troubleshooting. As anyone in an IT department knows, being able to remotely access a computer is a real way to improve effectiveness in resolving problems. TeamViewer also provides the opportunity for remote operation of the radios. Many

YAESU FT-897 ALL MODE 2/440/6 AND HF RADIO ALL MODES

of the radios are on remotely controlled AC power switches which allows them to be turned on or off from the Internet. This allows power conservation when the radios are not needed, the ability to shut down the radio if there is a problem with transmission (stuck microphone problems) and the ability to reboot the radio if necessary. The ability to remote into the radios is a great capability. Not only is it the basis for remote operation, but I have run point-to-point VHF digital tests sending text files from my home to CAARA. I've been able to monitor the reception at CAARA from home with TeamViewer. This is a good test for EMCOMM communications—sending a list of items or people when no other communications is available.

As a side note, an Amateur Radio hospital net exists on the South Shore that runs a net every month—this is the kind of thing that should be done on the North Shore—Addison Gilbert and Beverly hospitals have ham radios stations already. Something to consider.

I'd like to thank the team that renovated the second floor. It is now an amazing space. We overlook the amount of time and effort it has taken to clean out and turn so much of the "surplus" gear into cash. The painting, new blinds, renovation of the Vintage Room, cable tracks on the walls, functional equipment racks, antenna patch panel. All of this, and a nice conference area as well. There is even a bench with test equipment for repair and testing. CAARA members should be really proud of this space.

We now have the classrooms and equipment. We need students—people who want to learn something new, become proficient at radio operator skills. We need teachers—Elmers who have operated for decades to show the novices how to get started, how to get better. We have the laboratory—now we need the experiments. Figure out how to operate new modes, how to configure what we have to work with what's new in ham radio. Amateur radio is alive and kicking.

So…with this wealth of opportunities, I'd like to see a wealth of activity. CAARA as a club needs to make the

next step—focus on the big picture and stop petty bickering. Will CAARA save Cape Ann in the next great disaster? Unlikely. Will we become better operators, be able to help our community in times of need. That's up to us.

On the right is the antenna patch panel which allows any station the use of any antenna

This is a new station setup for vhf and uhf radio operation. With these radios you can work on two or six meters all modes using the 2 and 6 meter beams on the new tower installation.
This station will also have an all mode 220 radio and antenna.

This would be fun to use in one of the ARRL VHF-UHF radio contests.

This one of the test benches we are in the process of setting up. On the bench are a few Astron power supplies to be tested, a donated vintage radio that works and is being gone thru, and one of our 2 meter repeater amplifiers which needs a new power transistor installed.