

CAARA NEWS



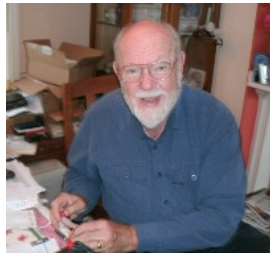
Cape Ann Amateur Radio Association
MARCH 2019 Edition



PRESIDENT'S COLUMN

by Hank- W4RIG.

The CAARA Board meeting of February 9, 2019 was held at 6 Stanwood Street with several members present who were not regular Board members. It has always been our pleasure to welcome interested members to these open meetings regularly held on the second Saturday of each month at 11:00 AM. The Board approved the cancellation of our regular phone service and replacement by a Skype system for use if members have an emergency and do not have cell phones available. Instructions are posted by the bulletin board on the first floor of our building. This system saves CAARA about \$49 per month and we retain our WiFi system for internet connections. The old phone was rarely used and messages should now be communicated directly with officers and Committee Chairs. Contact information is available on our Website. I can be contacted at president@caara.net or W4RIG@arrl.net. The Board also authorized the movement of \$5,000 from our regular checking account into another short term CD. This will still leave approximately an amount equivalent to our annual operating budget in the checking account to cover



information on access to the building via the lock box on the wall next to the entry door in the front of our building. We ask that individuals that wish to utilize the radio equipment or facilities at 6 Stanwood clear their requests with the Board. All members need to be checked out by qualified Board or Committee members before using the radio equipment. This avoids operating errors or resetting computer programs without permission or at least clearing any changes with the Board or others with those responsible for operations. Dave Linsky, our Building Committee co- Chairman, other members of the Building Committee or the Board can assist in access to the building. We expect to be posting some surplus equipment and other related items for sale on eBay in the near future. Offers to purchase any surplus equipment are always welcome and should be made to Board members or the CAARA treasurer Tony Marks. Thanks for your continued participation in CAARA activities and 73 - Hank

INFORMATION DESK

by Dean- KB1PGH



Well we will start off first by announcing the one and only ARRL contest for March and it is the International DX phone contest which will be held on March 2-3. I think this month I will cover the topic of radio etiquette and a few tips and reminder of HF and repeater operation. We will start off on a few things on HF operation. First of all please take a good read of the FCC Part 97 rules for the amateur radio bands. You can easily find them online or the ARRL sells the Part 97 booklet. Especially look over the part of station control operators. Next, even before you key the mike on your rig please make sure that you are on the right mode and frequency. Especially with today's computers and digital modes. Make sure you are on the sideband for the right band and make sure you are modulating correctly. I can't tell you how many times hams have just "winged it" and have been on the wrong band or otherwise. The next thing to do is get to know your frequencies. Make sure



regular utilities and other routine expenditures. We are closing out the regular membership renewals for review at the March Board meeting so if you have not paid your 2019 dues please do so before March 9.

I have received a few requests for

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 ATT 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 located at the CAARA clubhouse.

The former W1RK 443.700 repeater is now on the ATT 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 beam, vertical/wire antennas along with an operating 2 meter packet station as well as 2/440 meter voice and 220 MHz Transceivers.

Amateur radio exams are held on the second Sunday of each month at 10:00 AM at the CAARA clubhouse. Anyone who is considering a new license or an upgrade, is welcome to test with us. Pre-registration necessary. Contact the head of our VE team Rick Maybury-WZ1B if you have any questions about monthly testing.

Monthly member meetings are held on the second Saturday of each month at noon.

Each Sunday evening at 9:00 PM, 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.

your not on a frequency reserved for digital or SSTV use. Once you tune to a frequency take a bit a listen. Listen in case you hear traffic on the frequency. One good practice after you listen for a bit is to say "Is this frequency in use?" with your callsign just to make sure your not interfering with someone. One other thing you can do is get to know the calling frequencies on each band. The ARRL band chart has them or you can copy a list online. One other thing that just hit me. Make sure that you are only talking on the frequencies that your license allows. Extra class license holders have more spectrum to talk on the General or Advanced class license holders. Be aware also of "Split" operations when tuning the bands. You don't want to be transmitting on the listening frequency. One other basic concept to remember is to give your callsign when you first transmit, then every 10 minutes if you are in a QSO, then again when you sign off. If your new to the hobby make sure you learn your "Q" codes. Do you know what QST or QSO means? You should. I think the summary here is just to be aware of your surroundings and have situational awareness while operating HF. A little paying attention goes a long way. While we are at it. Lets take a look at some of the HF calling frequencies. Each HF band has a set of calling frequencies for modes such as SSB, CW, AM and QRP SSB. For example on 6 meters the SSB calling frequency is 50.125 MHZ and lets say for 29 meters the QRP SSB calling frequency is 14.285 MHZ. You can find the complete list of calling frequencies online. For the last tidbit of information as you may know I'm a big fan of Icom radios, especially the IC 7300. If your looking into Icom radios you can check out their website at www.icomamerica.com, There's another great website that is chock full of information on Icom radios including in depth reviews and that is www.ab4oj.com. If you own a Icom IC 7300 and are looking for more information on it there is the www.g3nrw.net/ic-7300 website as well. That's it for this month. 73

Hints and Tips

Usually each month I review a ham radio related product but since I have not bought anything in the past month I thought I would go back and go over a couple of items that you may not know about. So if you look at the photo you'll see a couple of things. Lets look at the one on the left first. Everyone knows that every new HF rig comes with the fuse holder wire you plug into the back. Well did you know that those factory fuse



holders are notorious for creating power problems later on? What happens over time is a layer of corrosion and oxidation builds up in the holders between the plug and the fuse and that will cause a loss of power between your power supply and your rig. The Icom line of rigs have been known to have this issue as I have read about it in the reflectors but this issue is common for all rigs. What happens is the oxidation causes an amperage loss and then your HF rig will start to lose full power output. Hams will see that their rigs power output is dropping and will think that there is something wrong with the rig or antenna system. HF rigs need the full 13.8 volts to have full power output. So anyway one solution to this problem is to purchase the ATC style fuse holder from Powerwerx. It has 10 guage wire and can handle 40 amps. It is a much higher quality than the OEM fuse holders that came with your rig. They come with powerpole connectors and even ring terminals if you want. They cost \$16.00 and can be purchased at www.powerwerx.com. At least at a minimum check the



voltage at the rig end of your power cable coming from your power supply. You may be surprised that it is not the 13.8 volts you suspect. Now on the right side of the photo do you see that gray metal ring? Do you know what that is and what it does because you should. Many hams will have no idea of what this is and how it could help them tremendously. It is a ferrite ring toroid core. It is also called a AC/DC noise filter choke. Do you know how you make this choke work? Just wrap your AC or DC power cord around it a bunch of times. I have reviewed these in my past columns. These cores create impedance and they stop electrical noise which cause RFI and EMI from getting into the circuits of your HF rig via the power cord. Now they make different types of these for different applications so if you want to get

one for the HF portion of the band make sure you order the FT Mix 31 for HF and FT mix 61 for VHF and UHF. these rings are 1.4 inches in diameter. You can get these for \$10.00 a piece at www.palomar-engineers.com. They sell a variety of common mode current suppression devices which can help with you EMI and RFI so take a look at their website. So have fun trying these out. They will certainly make your ham life easier.



Look at you—folding laundry. Last night it was the dishes! What part of "NO, you're not buying ANOTHER RADIO!" don't you understand?

RANDOM THOUGHTS

Jon-K1TP



According to statistics from Dick Ober, one of our web masters, we have about 30-40 members read this newsletter out of 100 members per month. Almost everyone has Internet, I wonder why so many do not read the monthly newsletter? It would be nice if a few members would send in articles, photo's, anything to help with the monthly publication

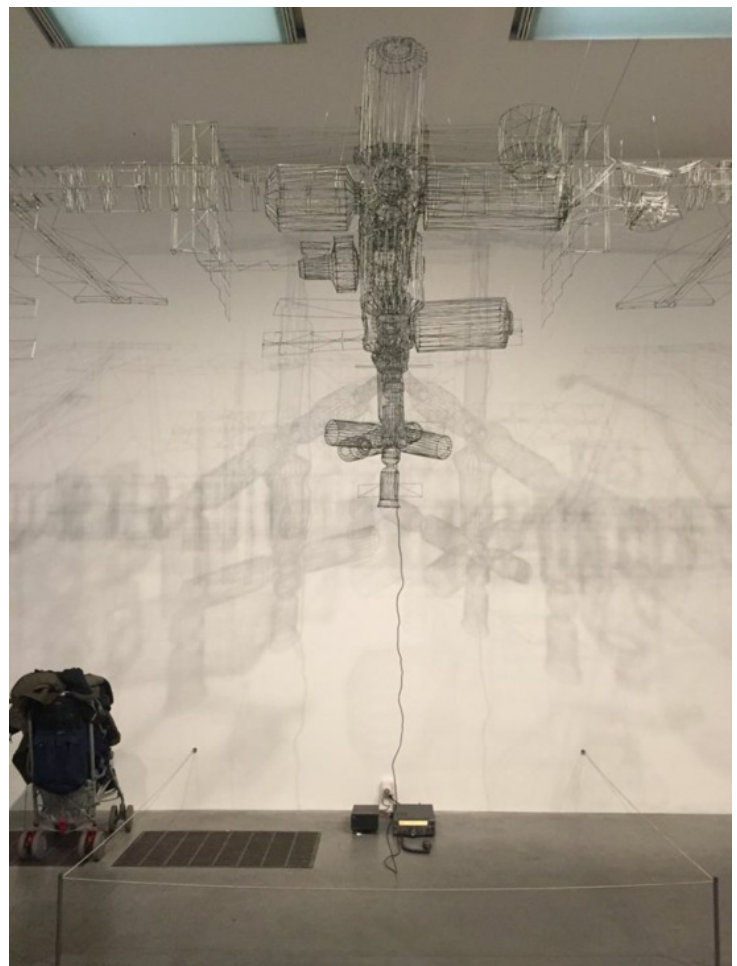
No activity at the club as of late, seems like we need something to jump start the club, get some group activities going that would benefit the members and get members to utilize and enjoy the club facility. How about getting some speakers for future member meetings? The topics don't have to be ham radio all the time. NSRA has monthly meetings that have included model trains. How about photography, astronomy, digital radio including DMR and Fusion, build a balun, list excess club gear on EBay and pack it for shipping, start up the club generator and show a few members how to do it, discuss a plan to get local schools or cub scouts involved with ham radio,let's try something!

Tate Gallery features Ham Radio as art

The impressive artwork 'Ten Minute Transmission', featuring the amateur radio Kenwood TS-2000 transceiver and the International Space Station, is once again on display at the Tate Gallery in London

The Tate Gallery says:

Ten Minute Transmission is a sculpture by Jennifer Allora and Guillermo Calzadilla modeled after the International Space Station. Made of wire and attached to a ham radio transmitter, this sculpture receives radio signals from the airwaves and transmits them into the gallery space.



The Shade Tree Mechanics Association by Curtis-AA3JE



I have wondered where all my old pals went. Not my neighbors, they keep in touch (mostly out of self defense), I mean the other members of the STMA, the Shade Tree Mechanics Association.

My eldest son, who held certifications from the manufacturers for multiple vehicles, appliances, electronic devices and such, always referred to us by cute, affectionate names (butchers, hackers, idiots, bozos), but we stood ready to offer multiple, conflicting streams of advice to whatever poor fool asked us anything.

Why such people did so after seeing our vehicles, or out shops, is beyond me. I think they thought that if we could keep vehicles in that condition running, or work under those conditions, we must be miracle workers.

When I moved to “Where the Bear Poops” in New Hampshire, I went scouting, but the garage up the road that looked likely had closed when the owner was caught selling State Inspection Stickers. (\$100 Inspects any car, no waiting), and I began to think we had gone extinct.

Boy was I wrong. I was not adequately technological! They all moved to YouTube! YouTube, analyzing my purchasing and viewing habits, began throwing up people’s home made mechanics videos. I took one look and I was hooked!

In my wildest dreams I would never have thought of taking a wrecked Chevy Truck (read end), with a “stuck” (rusted solid engine), a 1940s tractor, and embarking on a V-8 conversion. If I had, I would have at least pulled the pistons after I found water in the cylinders that had been there long enough to spawn frogs. Or maybe put in new rings at a minimum.

Not a bit of it! With penetrating oil and a really big pipe wrench, they got the V-8 free, and scraped out the worst of the rust in the cylinder and used the front end loader to lay the motor and transmission in the tractor chassis. Then (still holding the motor up with the loader), they cobbled up some motor and transmission mounts (crude and possibly adequate), stripped the motor of all frippery (spark advance, pollution controls, computer, crankcase vent, all of that), and solved the fuel pump problem by welding a large gas tank two feet up above the hood (so the operator could see where he was going between the tank and the hood..

On the day of the big “reveal”, it actually started and ran, minus mufflers, of course, and the only thing that didn’t look right was the operator wearing a respirator, as the smoke from the engine was pretty thick. But awesome. The only time I have ever seen worse was when my buddy and I forgot to pull the rags out of the pushrod tunnels and closed a major highway till the cloud cleared.

Take a look! It will make you laugh, cringe, or cry. (depending on your level of knowledge). My other favorite are the guys that get all their lower ends from the junkyard, a wise move as they blow them all up



anyway.

Next time I will talk about the other guys that put a supercharger on a lawn tractor.

If bored, troll on YouTube! You will find that the boys are still at it, and will bring a warm glow to your heart.

ARRL Board Meets in January: ARES Plan Adopted, National Traffic System Embraced

The ARRL Board of Directors - the League's elected policymakers -- met in formal session last month, taking significant actions of special interest to ARES, NTS and other amateur emergency communications communities.

The chairman of the Public Service Enhancement Working Group (PSEWG), Great Lakes Division Director Dale Williams, WA8EFK, updated the Board on how the committee had incorporated comments gathered from last fall's survey into its report and the new ARES Strategic Plan draft. The Board adopted the *ARES Plan* as proposed by the PSEWG and recommended by its Programs and Services Committee. The new, full ARES Plan can be viewed [here](#).

Under the new plan, there are three ways to serve with commensurate levels of training requirements that will allow ARES participants to enter the program, and if they choose, migrate to higher levels of qualification and service. Level 1 is the basic ARES level, with introductory training conducted by the local ARES group to meet their needs and those of their served agency or partners. This training could be formal or informal, and would introduce the ARES participant to the fundamentals of emergency communications and provide instruction on how participants are to conduct themselves while serving in the field or otherwise activated. Participants may elect to remain at this level, or any level, based upon the extent of their desired ARES involvement.

Level 2 -- To qualify for this level, participants must complete the following courses: ARRL's EC-001 *Introduction to Amateur Radio Emergency Communications* (a no-cost program) and the now ubiquitous FEMA Independent Study courses IS-100, IS-200, IS-700, and IS-800 that lend critical knowledge for operating efficiently under the Incident Command System. Participants are also encouraged to take advantage of training opportunities available through partners to enhance their knowledge and skill set.

Level 3 -- The successful candidate will complete training that prepares them to assume ARES leadership positions, including the key program coordinators: the local/county Emergency Coordinator (EC), Assistant District EC, District EC, Assistant SEC, and the Section Emergency Coordinator. Leaders are required to complete ARRL's EC-016, *Emergency Communications for Management*, and FEMA Professional Development Series courses IS-120, IS-230, IS-240, IS-241, IS-242, IS-244, and IS-288, the Role of Voluntary Organizations in Emergency Management. Participants also are encouraged to complete the FEMA courses IS-300, and IS-400 should they be available locally.

Readers are encouraged to review the entire new plan, as it represents the first major program changes in decades and will form the cornerstone for the venerable ARES program going forward. PSEWG Chairman Williams said the adoption of the ARES Plan is not the end of this process. "ARES cannot remain stagnant only to be updated once every few generations. The ARES Plan, and the ARES program, must be able to evolve," he said, adding that the emergency preparedness staff at ARRL headquarters will conduct an annual ARES Review to insure continued program relevance. There is more discussion of the new ARES Plan from ARRL Communications Manager David Isgur, N1RSN, [here](#).

Williams noted that after finishing the ARES portion of its agenda, it will move to work on aspects of the National Traffic System. The Board adopted a resolution recognizing that the National Traffic System provides a large corps of operators experienced in formal third party message handling and routing procedures, dedicated to providing emergency communications via radio. The Board noted that NTS uses all modes as appropriate and needed. The Board affirmed ARRL support for the National Traffic System and all amateurs involved in traffic handling, and their role as partners to ARES in ARRL's public service toolkit. The Board recognized the role and value of ARES and NTS in directly serving the public in addition to partnering with served agencies.

In other actions, the Board created a committee to establish the requirements for the ARRL's Emergency Preparedness Manager function. The committee, to be known as the EmComm Manager Requirements Committee, was charged with filing a final report two weeks before the Board reconvenes in July 2019.

Editorial: Do Double Duty for Public Service and Personal Health

The Centers for Disease Control and Prevention reports data that over one third (39.8%) of US adults are obese [see [CDC report](#)]. The CDC says Obesity-related conditions include heart disease, stroke, type 2 diabetes and certain types of cancer, some of the leading causes of preventable death.

Here's something all of us can do for both public service and personal health: combine your public event communications services with *participation in the event*. For example, last May, the National Multiple Sclerosis Society's *Bike MS: Citrus Tour 2018* was run with the ARRL West Central Florida Section amateurs providing communications support for the Support and Gear (SAG) vehicles, bike mechanics and multiple rest stops. The traditional model of Amateur Radio support is of deployment of operators to ride in the SAG vehicles, shadow race officials, course and rest stop coordinators, and other mission critical sites such as the start and finishing lines.

A potential new model of support would be to add radio operators on bicycles, *actually riding in the event*, a win-win scenario: the event safety committee gets more saturation of course situational awareness, and the operators get a healthy dose of exercise, burning off the calories of the doughnuts likely consumed at the pre-dawn briefing. (Check with your doctor first, and start slowly at first). Check your Body Mass Index (BMI) by using a [BMI calculator](#) from the National Institutes of Health.

Work on getting yourself in the healthy normal weight region of the BMI tables -- feel better physically and mentally, and most importantly, enjoy Amateur Radio for a lot longer in life. A great way to do it is by encouraging yourself and fellow radio amateurs who provide Amateur Radio communications at public events such as the Citrus Tour to fully engage in the event as a participant, too. Do Double Duty: Radio and Ride! --
Rick Palm, K1CE, Registered Nurse

US Amateur Radio Population Grows Slightly in 2018

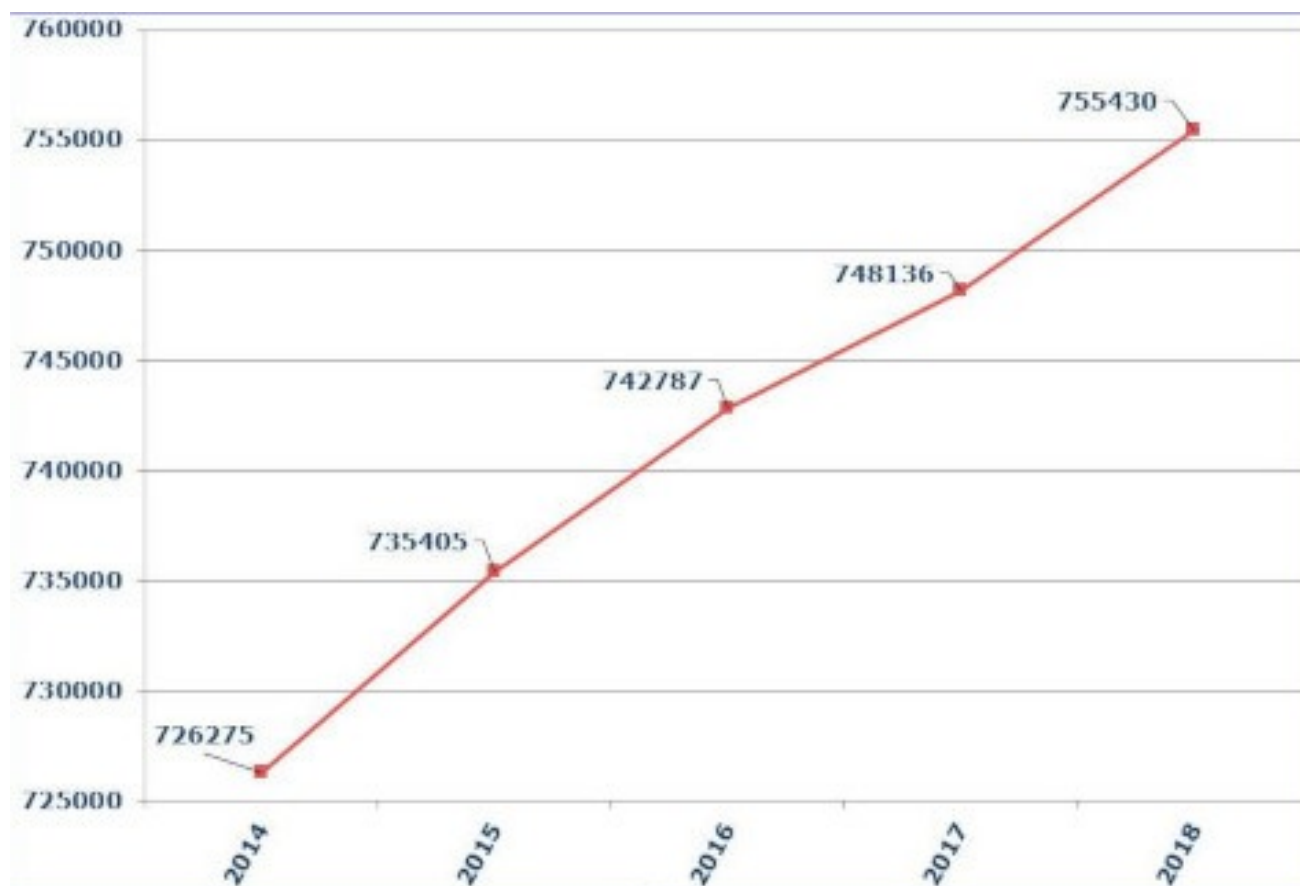
The US Amateur Radio population once again grew by about 1%, based upon 2017 and 2018 year-end FCC database statistics provided by Joe Speroni, AH0A. The 755,430 total licensees represent nearly 7,300 more license holders than those that were in the database at the end of 2017. Nearly 51% of the Amateur Radio population in the US -- 384,145 -- hold a Technician license. Generals are second with 175,949, and Amateur Extras number 147,369. Advanced and Novice licensee populations continue to decline, with 39,607 Advanced and 8,360 Novices, as the FCC no longer issues Advanced or Novice licenses. A more significant statistic is 31,576 *new* FCC licenses last year, although that's 620 fewer than came aboard in 2017.

"New amateur licenses granted by FCC are down 2% over last year," noted ARRL Volunteer Examiner Coordinator (VEC) Manager Maria Somma, AB1FM, "but this is the fifth year in a row the total has been greater than 31,000. I predict that the number of new licensees will be more than 30,000 at the end of this year as well, and I'm optimistic this trend will continue."

Upgrades also are down slightly, compared to last year -- 9,456 in 2018 versus 9,576 in 2017, she added. "For the fifth year in a row, we have conducted more than 7,000 Amateur Radio exam sessions in a year -- an important milestone for the ARRL VEC," Somma recounted. "Our program continues to provide outstanding service to the ARRL, its members, and the entire Amateur Radio community."

ARRL VEC filed a total 30,393 license application forms last year, compared to 31,014 in 2017. That includes new, upgrade, modification, renewal, and club station filings. At 7,035 in 2018, the number of exam sessions conducted by ARRL VEC marginally trailed the 7,075 held in 2017. ARRL VEC served 34,493 exam applicants in 2018, compared to 35,352 in 2017. Exam elements administered by ARRL decreased from 47,152 last year to 45,817 this year, Somma said. Nearly 1,800 new Volunteer Examiners (VEs) have been added to the ARRL VEC program.

HAM RADIO GROWTH CHART



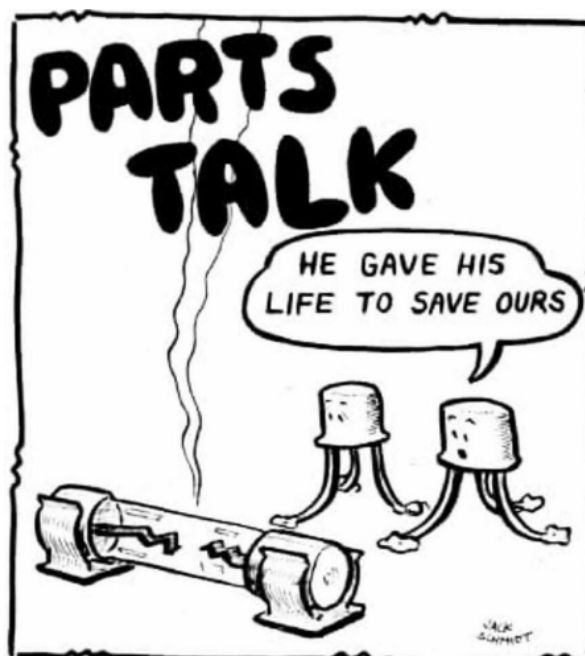
Fake News: Belgian News Magazine Misrepresents Amateur Radio Numbers

The Belgian Dutch-language weekly *The Sunday (de Zondag)* recently reported incorrectly that just 153 Amateur Radio licensees existed in the country, dramatically proclaiming, “Amateur Radio permits have dropped drastically in 5 years,” and asking, “Where have the radio hobbyists gone?” The error was based on a misunderstood parliamentary exchange. The facts are that 153 new licenses were issued in Belgium last year, and that 4,702 call signs have been assigned to individuals.

The magazine’s subsequent correction accurately reported “about 5,000 radio amateurs” in Belgium, but introduced another error by stating that the number 153 referred to the number of radio stations (free channels). The story appears to have been pulled from the magazine’s website.

Elsewhere in Europe, statistics in France show a declining ham radio population there, with 13,126 licensees in 2018, a 1.2% drop from a year earlier. That compares with 19,540 hams in France in 1996.

Germany reports 64,476 Amateur Radio licensees in 2018, about the same as a year earlier but reflecting an overall decline. In 2000, Germany boasted 79,380 licensees. — Thanks to Southgate Amateur Radio News and other sources



PUBLIC SERVICE ROAD RACES

CAARA Public Service Schedule 2019

- 1 Fool's Dual March 31, 9:00am 5K Race Start 10:00am Half Marathon O'Maley Middle School 32 Cherry Street Gloucester, MA.
- 2 Twin Lights Good Harbor Beach April 27, 9:00am Half Marathon Start Thatcher Road Gloucester, MA.
- 3 Rocky neck Art Assn. 5K. Run/walk Team Challenge May Date T.B.D.
- 4 Fast Half May 11, 9:00am Half Marathon Start Hamilton - Wenham High School 775 Bay Road South Hamilton, MA.
- 5 YMCA Backshore 5K Thursday, May 16th, 6:00pm:, Good Harbor Beach, Gloucester
- 6 Motif No.1 Day Arts Fest & 5k Fun Run Date T.B.D.
- 7 Cape Ann Trail Stewards. Dogtown 5 Mile Trail Run 19 May 2019 9:00 AM
- 8 Twin Lobster June 2, 8:00am 1-Mile Race Start 8:30am Half Marathon Start Gloucester High School 32 Leslie O Johnson Road Gloucester, MA.
- 9 YMCA Father's Day 5K Sunday, June 16th, 9am:, Rockport High School, 24 Jerdens Ln.
- 10 YMCA St. Peter's Fiesta 5K Thursday, June 27th, 6:00pm:, Stage Fort Park, Gloucester
- 11 Triple Threat August 4, 8:00am 1M Race Start 8:20am 5K Race Start 9:15am Half Marathon Start Rockport High School 24 Jerdens Lane Rockport, MA.
- 12 Half Marathon by the Sea September 22, 10:00am Half Marathon Start Manchester Essex Memorial Elementary School 43 Lincoln Street Manchester-by-the-Sea, MA
- 13 The Lone Gull 10K Road Race September. Date T.B.D.
- 14 Parker River Half Marathon. October 6, 9:00am Half Marathon Start Triton Regional High School 112 Elm Street Byfield, MA 01922
- 15 Ocean View November 3, 8:30am 5k Race Start 9:30am Half Marathon Start Ipswich High School 134 High Street Ipswich, MA 01938
- 16 Holiday MerryThon. December 1, 9:00am 5K Road Race Start 10:00am Half MerryThon Start Good Harbor Beach Thatcher Road Gloucester, MA.

Why should you participate in race events?

It helps the club financially, we receive a donation for each race. You are using amateur radio to provide a needed public service to ensure the safety and smooth running of a public event in local communities.

I would but I do not have a radio.

No excuse, we have loaner radio's available with a mag mount that will work in your car just by just plugging it into the cigarette lighter socket. We have loaner hand held radios as well!

I don't have transportation.

No excuse, we will pick you up and drop you off at your house.

I do not have the time to spare for a whole race.

Well, you can commit to a time slot, for just two hours. We will bend over backwards to get you to participate.





CAPE ANN AMATEUR RADIO ASSOCIATION

6 Stanwood Street
Gloucester, MA 01930

978-282-7645
www.caara.net

Repeaters on 145.130
224.900 & 443.700

S	M	T	W	T	F	S
		Open House-5- 10pm			1	2
3 CAARA NET	4	5 Open House-5- 10pm	6	7	8	9 BOD Meet- 11am Members Meet Noon
10 ON THE 145.130 REPEATER EVERY	11	12 Open House-5- 10pm	13	14	15	16
17 SUNDAY NIGHT AT 9PM	18	19 Open House-5- 10pm	20	21	23	23
23/31	26	26 Open House-5- 10pm	27	28	29	30