



# The Compass!

**Official Newsletter of the Great South Bay Amateur Radio Club, INC.**

July-Aug-Sept 2020

Volume 48

#7, 8 & 9

**ALL MEETINGS, OPEN HOUSES, CLASSES AND VE SESSIONS CANCELLED DUE TO THE CORONAVIRUS**

**PLEASE FOLLOW CDC, FEDERAL AND STATE GUIDELINES FOR SOCIAL DISTANCING AND DISINFECTING**

**WATCH YOUR EMAIL FOR ANY CHANGES AND UPDATES**

**STAY SAFE AND KEEP YOUR FAMILIES AND FRIENDS SAFE—WE WILL RETURN WHEN THINGS ARE BACK TO NORMAL**

**NOTE: The 2020 Babylon Villiage Fair Has Been Cancelled!**

## **Inside this issue:**

- ***New Ham Radio Licenses on the Rise***
- ***Remembering the Fire Island Lighthouse Event***
- ***RACES Members Needed***
- ***KB6NU's Guest Column***
- ***Covid-19 Transmission Via Radio: Explained!***



**Long Island's Friendliest Amateur Radio Club!**





# President's Message



What a summer! A lot of closed places and all the restrictions are a real pain in the butt. Everything is closed but the outside dining has been nice if you didn't melt from those hot days we had. As many of you know, my job puts me all over the place and I think I have been in every corner of New York City's five boroughs. My job has been a challenge with COVID-19. Having to wear the mask at times makes it a lot tougher to do my job but it is what it is right now.

As I sit here and write this message to you all I am so pleased that we as ham radio operators are a special group of people around the world. Think about this for a minute: When you call CQ on HF and have a QSO, you have a great time. You have no idea what that person looks like – it just doesn't matter. Take a look back at all the events we have all been to locally and all over the world. We are able to have a great time no matter who is there. It doesn't matter what anyone looks like or where they are from; it doesn't matter what color they are -- we all get along. Amateur radio, I think, is truly a special place. Many of us have built up friendships all over the world. All I can say is if the rest of the world would be like amateur radio operators there would be fewer problems.

I hope with all the restrictions keeping you closer to home, you all have all worked on your stations and antennas. That storm that blew through here did a good amount of damage all over our area. Our power here was out for seven days and our generator did a great job. I encourage you all to look into a standby generator for your homes. The nice thing about a standby generator is you don't have to worry about setting it up every time. Just make sure you size it correctly. I also hope you all were able to clean up the mess that storm made: We had a good one here for sure.

So what's going on? We got approved for our tower install at the DPW yard. The install is going to take some time since we didn't know if it was a "go" or not so we did

not start any work on the tower. The town has agreed to dig the hole for the base. A foundation will be providing funding for our project to cover the costs. Once we receive it the work will start. We have to order all the parts we need for the tower install. We will be using it at the EOC at Open Houses, contests and in emergency situations. The tower will have a SteppIR beam 6 to 40 meters and possibly an off-center-fed dipole which will be controlled remotely from the EOC only for now. We are working on remote operation for our members with restrictions at their QTH, especially for those whose homes are in an HOA. This is not going to happen overnight. A lot of things have to be in place before that happens. First the operation from the EOC is going to give new HF operators a chance to see what can be done with the right equipment and train them to be efficient operators. Also: How many times have you tried to work a station on 20 meters from the EOC and you never got them? You will have a shot soon.

I don't know if you have heard about this – but please read the notice below:

08/28/2020

*Amateur radio licensees would pay a \$50 fee for each amateur radio license application if the FCC adopts rules it proposed this week. Included in the FCC's fee proposal are applications for new licenses, renewal and upgrades to existing licenses, and vanity call sign requests. Excluded are applications for administrative updates, such as changes of address, and annual regulatory fees.*

*The FCC proposal is contained in a Notice of Proposed Rulemaking (NPRM) in MD Docket 20-270, which was adopted to implement portions of the "Repack Airwaves Yielding Better Access for Users of Modern Services Act" of 2018 — the so-called "Ray Baum's Act."*

*The Act requires that the FCC switch from a Congressionally-mandated fee structure to a cost-based system of assessment. In its NPRM, the FCC proposed application fees for a broad range of services that use the FCC's Universal Licensing System (ULS), including the Amateur Radio Service that had been excluded by an earlier statute. The 2018 statute excludes the Amateur Service from annual regulatory fees, but not from application fees.*

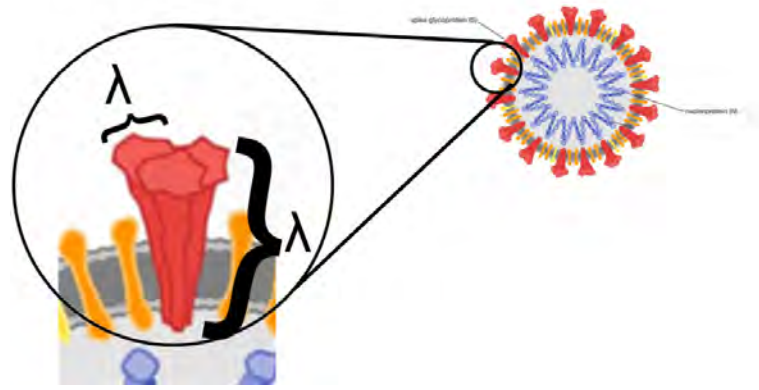
*"[A]pplications for personal licenses are mostly automated and do not have individualized staff costs for data input or review," the FCC said in its NPRM. "For these automated processes — new/major modifications, renewal, and minor modifications — we propose a nominal application fee of \$50 due to automating the processes, routine ULS maintenance, and limited instances where staff input is required."*

*The same \$50 fee would apply to all Amateur Service applications, including those for vanity call signs. "Although there is currently no fee for vanity call signs in*

*Continued on page 5...*

# Quantum Electrodynamics Linked to Coronavirus Transmission:

By Kevin, AB2ZI



*Various Wavelengths of Coronavirus Protein Spikes*

Rumors concerning 5G and other millimeter wave systems being able to transmit Coronavirus through cell phone or other radio based systems were initially discounted as a no-go conspiracy theory by the scientific community. The idea that a biological virus was able to be transmitted “over the air” through cell phones or other radio systems was considered “ridiculous” or “absurd” by “scientists.”

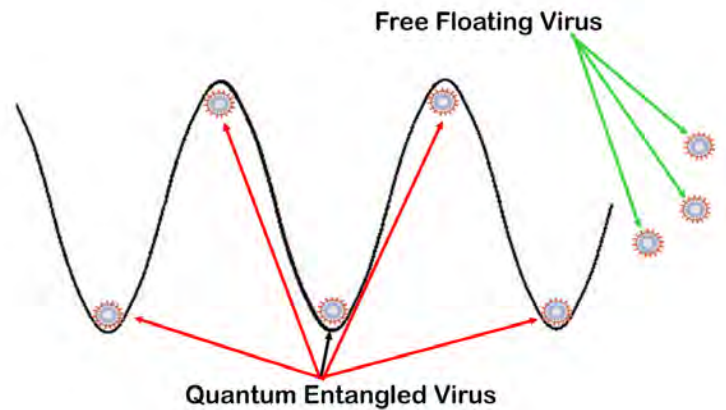
Researchers at a prestigious quantum physics YouTube channel have uncovered the truth: there is in fact a quantum level mechanism in play that entangles coronavirus within the electromagnetic waves of radio transmissions at super high frequencies which have millimeter, and in some cases, micro and nanometer wavelengths.

It seems that coronavirus proteins on its surface, and the internal structure which resembles a sinusoidal wave, have quantum entangling charges which case the virus particles to become trapped in the troughs of transmitted electromagnetic waves. The virus particles exhibit both electric and magnetic field entangling polarities that attract them simultaneously to the E and H fields of those waves.

“The proteins on the virus outer shell are like quantum wave antennas,” said one of the YouTube hosts who claims to have read every paper on quantum physics by self-described physics expert Deepak Chopra. Mr. Chopra describes this as, “...sympathetic non-colinear translation of atypical archetypes reacting to sub-sub atomic nuclei transmogrifying into super collocation determined by quantum states of non existence.”

In a mechanism similar to Schrödinger’s Cat, the protein spikes on the surface of the virus are both attracted to, and at the same time, repelled by, both the electrical

and magnetic fields, but orthogonal to the direction of induction simultaneously, but at the same time not at all. The spikes exhibit peculiar wave resonances at different frequencies depending on which part of the protein is in polarization with the passing signals. If you look closely at the diagram, you can see the wave-shaped structure which homeopathically resonates with any and all frequencies. However, the longer wavelengths have too much space at the peaks and valleys to do more than just impart a psychic charge, very similar to chi, the vital energy that animates the body, and thus makes it more attractive to entry into biological materials. This is one of the reasons that crystals can be used to inhibit the transmission of the virus.



We can see in the second illustration that free-floating virus is trapped in the peaks and valleys of the electromagnetic waves as they pass by. Those entangled viruses are now encapsulated at the quantum level with those electromagnetic waves and can be send over billions of miles and retain their transmissibility. In this quantum entangled state the virus can be brought into receiving equipment where up they are subject to dis-entangling due to the Heisenberg uncertainty principle. Here is where the virus transitions from a high-energy viral carrying signal, to a much lower energy state audio frequency as produced by the devices speaker. These lower energy frequencies do not have enough energy to retain the virus and it is released

*Continued on page 5...*



# FIRE ISLAND LIGHTHOUSE: ILLW 2020

By Walter, KA2S, with KA2D and K2TV



August 22 and 23 would have been the GSBARC's annual Fire Island Lighthouse activation for the International Lighthouse Lightship Weekend event. Sadly, I sit listening to all the lighthouse activity from my home QTH. Unfortunately, the COVID-19 virus stopped the club's participation this year. For the safety of the club members and the fact that the National Park Service would not grant the club a permit, NO LIGHTHOUSE! This is the first time since 1997 that we have not had a presence at the lighthouse!

The first year of operation was on Aug. 16 and 17 of 1997 and organized by Rich AC2P (SK), Tom KA2D, Bob W2IK and Len W2FX. At that time it was a joint effort by GSBARC and the Islip ARES group. Three stations were set up on the west patio area using an OCF dipole from the flagpole, an R-5 vertical and a tri-band beam mounted on the telephone pole that was at the south end of the parking lot. There was no Lens building there and we were able to park at the lighthouse. We were also permitted to stay overnight!!! Thanks to our dear friend "Larry the Lighthouse Keeper" and of course all of the staff and volunteers at the lighthouse. Yes, the National Park Service too. Without their help and support none of this could have happened. Over the years we BBQ'd dinner and cooked breakfast, too. Times did change over these 23 years with more and more restrictions put upon GSBARC by the NPS. Still, it remains a fabulous event. In 2008, the club also operated a special event for the 150th anniversary of the lighthouse.

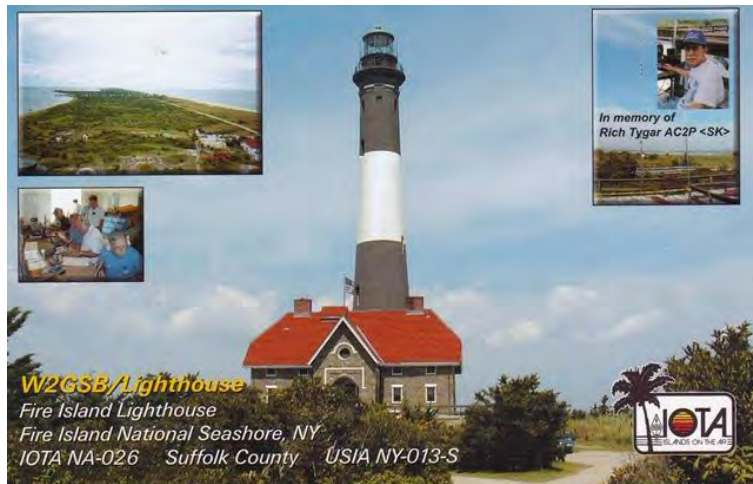
Through the years many different configurations of radios and antennas were used -- all with varying results. The ocean to the south, the bay to the north, salt water and an unobstructed horizon all worked to our advantage. The weather almost always cooperated as well.

A special thank you to all members through all the years for helping set up and break down at the lighthouse event.

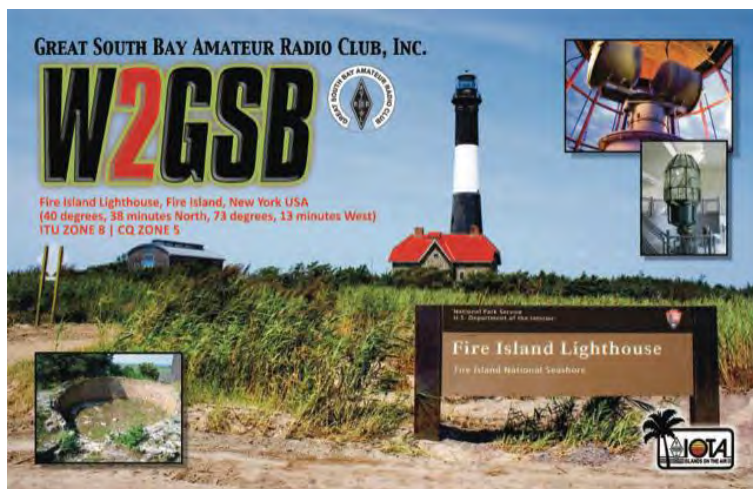
I hope that 2021 will be a much better year for the club to be able to operate as we normally have. The next ILLW is scheduled for August 21 and 22 of 2021. Hope to see you there. 📻



*The Operating Location*



*The 'old' QSL Card*



*The 'new' QSL Card*

*the Amateur Radio Service, we find that such applications impose similar costs in aggregate on Commission resources as new applications and therefore propose a \$50 fee," the FCC said.*

*The FCC is not proposing to charge for administrative updates, such as mailing address changes for amateur applications, and amateur radio will remain exempt from annual regulatory fees. "For administrative updates [and] modifications, which also are highly automated, we find that it is in the public interest to encourage licensees to update their [own] information without a charge," the FCC said.*

*The FCC also proposes to assess a \$50 fee for individuals who want a printed copy of their license. "The Commission has proposed to eliminate these services — but to the extent the Commission does not do so, we propose a fee of \$50 to cover the costs of these services," the FCC said.*

*The Ray Baum's Act does not exempt filing fees in the Amateur Radio Service. The FCC dropped assessment of fees for vanity call signs several years ago.*

*Deadlines for comments and reply comments will be determined once the NPRM appears in the Federal Register. File comments by using the FCC's Electronic Comment Filing System (ECFS), posting to MD Docket No. 20-270. This docket is already open for accepting comments even though deadlines have not yet been set.*

*So let's see what happens! Seems that all the work is done by the VEC staff, the ARRL, the 5YI Group and QRZ.*

*Hopefully we will back at the EOC for open houses and meetings. To the tech crew repeater crew and tower crew members, I should have an answer as to when we can get down to the EOC to do all the work we need to do there with our meeting room. Just in case you all don't know what is going on we are going to improve our smartboard sound with a surround sound system so we can hear our videos and presenters a lot better. A new computer was donated to us for the front computer which takes forever to run things. I hope you have noticed there are no problems with the AllStar and D-STAR systems since we installed a UBS for the router and modem which was also donated to the club.*


*I would like to thank you all for taking part in the Zoom meetings. I myself would have loved to be at the Fire Island Lighthouse for ILLW Weekend but coronavirus messed that up for us. As the weather cools off, maybe we can do open-air Open Houses at Town Hall Park.*

*73. John Melfi, W27CB* 

directly into the air with the same effect as breathing an infected person's exhalations.

There is also another vector of transmission due to the resistive nature of human tissue. The radio waves at those higher frequencies (like 5G) cannot pass through our skin. While high power and close proximity to microwaves causes heating effects, their absorption by the skin collapses the wave function and the coronavirus is deposited, in massive numbers, directly onto human skin, into our noses, our mouths, etc., thus causing infection and spread of the disease.

This is why masks are ineffective in preventing the spread of the virus. The EM waves are able to pass through the paper/cloth of the mask and set up small resonances between the mask material and face, building higher and higher standing viral waves (like the chamber of a microwave oven) which dump billions of virus molecules directly into a person's mouth and nose.

Crystals of a proprietary mix of beryllium, quartz and molybdenum, have shown a resistance to decoupling of the quantum wave function, but require the user to be completely encased in the crystal. Another method is the employment of special *Schrödinger-Faraday Uncertainty* cage capable of blocking frequencies from 2 megahertz up. Because of the quantum nature of the encapsulation, there is a possibility of gamma rays directly depositing the virus into our DNA a special Faraday cage would need to be a six sided one made up of 2-foot-thick lead with a hermetic seal on the entrance—this would have the negative result of also blocking oxygen from entering. According to Mr. Chopra, "A person could survive inside indefinitely without food, water or air, as long as no one opened the door to see if the person inside was alive or dead." 



*Note: This article is meant as satirical entertainment and makes fun of a lot of conspiracy theories and quack science. If you find it to be compelling I can sell you the Greek Island 'Hyperbole' which is definitely a real place... —AB2ZI*



# Securing Powerpole connectors

By Dan Romanchik, KB6NU



In preparation for this year's Field Day, I made a bunch of cables with Powerpole connectors to connect the solar panel, charge controller and batteries that I used. If you're not familiar with Powerpoles, you might want to check out this YouTube video (<https://www.youtube.com/watch?v=o31iuOcQ-jo>). They're really great connectors, and have become the DC connector of choice for many hams.

When I make up Powerpole cables, I normally don't bother trying to secure the two halves together, especially if you're using some decently heavy gauge wire. They fit together pretty tightly, and don't come apart easily. Even so, I think securing them together is a good idea. You can buy a little roll pin to insert between the red and black housings that is supposed to prevent them from coming apart, but many folks complain that the pin has a tendency to fall out. This not only defeats the purpose, but could also damage your equipment.

Securing them is the right thing to do, though, and I recently came across some great suggestions on how to do this in the daily digest that I receive from the Elecraft-KX mailing list (<https://groups.io/g/Elecraft-KX>). Here are the best tips from the thread, Securing Anderson Power Poles (<https://groups.io/g/Elecraft-KX/topic/75060413>):

- Rudy K8SWD: You can thermally bond the red and black housings with a soldering iron like you are making little welds on both sides. Permanent (mostly) but it works better than the roll pins. Just clean the tip really good before soldering!

- Dave K0CDA: [Anderson] also make connectors that are thermally bonded together in pairs. They do NOT come apart.

- Don W3FPR: I use a drop of Super Glue on the junction

of the plastic pieces. Warning – that glue grabs quickly, so slide the two pieces only enough to start the assembly, then apply the drop of glue and quickly finish sliding them together. I have never had ones prepared like that come apart, and I don't use roll pins. I will say one more thing – use only the genuine APPs. I have seen some knockoffs that do not mate well.

- Greg KC9NRO: Take a hot soldering iron. Wipe the tip with sponge. Run the tip down both side of APP bonding the black and red sides together. Clean soldering iron tip and apply some solder to tip. That's how I roll. Never comes apart

- Mike AI4NS: PVC cement will soften the plastic enough to bond them together. You can also get plastic welding rods, such as Dainty Plastic Welding Rods ([https://www.amazon.com/dp/B086HNQXM3/ref=cm\\_sw\\_r\\_cp\\_api\\_i\\_poR8Eb88N54P4](https://www.amazon.com/dp/B086HNQXM3/ref=cm_sw_r_cp_api_i_poR8Eb88N54P4)). Chuck a rod in a Dremel and weld them together. I have made plastic boxes and panels using this method.

- Jack WD4E: Snip the cotton end off a Q-tip, cutting at an angle. Insert into hole made for roll pin, cut off excess, save remainder of Q-tip for next requirement.

- Troy K4JDA: 2.5mm screws work well, stay in, and are easily removable.

I posted these suggestions to my blog (<https://KB6NU.com>) and got a few more great suggestions:

- Tom KB8UUZ: Fat toothpicks also work great. Jam it in, break it off.

- Bruce N0NHP: I use MEK (Methyl Ethyl Ketone) replacement to clean my circuit boards after soldering. A single drop of MEK on the junction between the two halves of the Powerpole shell will fuse them. It can be broken with a sharp tap but not accidentally. It will set and dry in seconds and should be applied after the shell pieces are put together.

I think these are all great suggestions. I think that I'm going to try the cotton swab method. While reading them, another thought occurred to me. I haven't tried this yet, but I'm thinking a little drop of hot glue on the roll-pin hole might work, too. 💡

—Dan Romanchik, KB6NU, is the author of the *KB6NU amateur radio blog (KB6NU.Com)*, the *“No Nonsense” amateur radio license study guides (KB6NU.Com/study-guides/)*, and often appears on the *ICQPodcast (icqpodcast.com)*. When he's not thinking up new ways to enjoy Field Day, he likes to build stuff and operate CW on the HF bands.



## ***RACES NEEDS VOLUNTEERS!***

***IF YOU WOULD LIKE TO BE PART OF THE RACES GROUP THERE IS SOME FREE TRAINING THAT YOU NEED TO COMPLETE***

***ICS 100*** <https://training.fema.gov/is/courseoverview.aspx?code=IS-100.c>

***ICS 200*** <https://training.fema.gov/is/courseoverview.aspx?code=IS-200.c>

***ICS 700*** <https://training.fema.gov/is/courseoverview.aspx?code=IS-700.b>

***ICS 800*** <https://training.fema.gov/is/courseoverview.aspx?code=IS-800.c>

***Transcripts*** <https://training.fema.gov/emiweb/downloads/tranrqst1.pdf?d=07-31-2019>

***ONCE YOU HAVE COMPLETED THE ABOVE PLEASE SEND YOUR TRANSCRIPTS TO***

***JOHN MELFI W2HCB RADIO OFFICER FOR THE TOWN OF BABYLON***

***EMAIL YOUR TRANSCRIPT TO W2HCB@ARRL.NET***

***TO ALL OUR CURRENT RACES MEMBERS THANK YOU FOR YOUR CONTINUED DEDICATION TO AN IMPORTANT PART OF AMATEUR RADIO*** 

## ***Ham Radio Licenses on the Rise***

Data from the ARRL shows that ham radio licensees are increasing. When you look at the graph on page 8 you see two significant markers that are likely driving this growth.

The removal of the code requirement by the FCC.  
The economic collapse of 2008.

The Morse code requirement was always an intimidating part of obtaining your General FCC license. Learning Morse code is like learning a second language. It takes time and effort to learn, and that's not a bad thing. However, it doesn't change that it scared many people away from the hobby. When the FCC removed this requirement in 2007, I believe it opened the door for many who spent years on the fence. Then you have the economic downturn of 2008. What does that have to do with ham radio? A lot.

After the economic downturn, the United States watched as survivalism, now commonly calling "prepping," entered mainstream culture. People were worried as the country was involved in multiple wars and our economy was on the brink of collapse. Many stocked up on food storage, water, firearms, and...communications equipment. As our country spiraled into more turmoil ham radio licenses steadily increased to more than 750,000 by the end of 2019. Is ham radio a hobby or a public service?

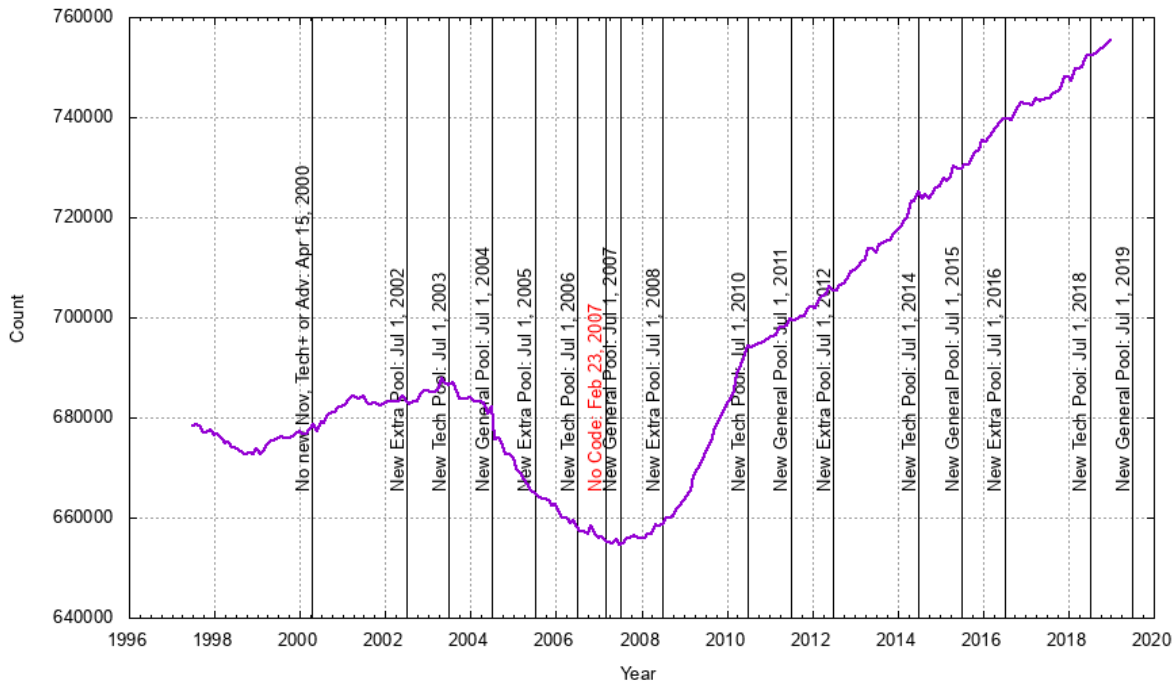
The debate between ham radio being a public service or just a hobby is a common argument. The reason we exist is to ultimately have a trained citizenry that can response to natural disasters. This will always be a thread in our hobby, but this thread is merging more and more with digital functions, including the internet. That's where some people get grumpy.  
FT8/JS8Call

FT8/JS8Call has drew the ire from older operators who don't see it as "real ham radio." Though the technology could have huge implications for passing traffic when conditions are rough in remote parts of the world.  
Digital Mobile Radio (DMR)

Digital Mobile Radio has exploded in growth in the past decade. Many amateur radio operators use internet-connected hotspots to operate from their shack without tying up local repeaters. These internet-connected repeaters hold value, the biggest is the ability to have two different time slots carrying voice traffic simultaneously on one repeater, whether they have an internet connection or not. DMR doesn't need to have an internet backbone to be a game-changer for emergency communications.

*Continued on page 8*

Total US Amateur Radio Licenses through end of Dec 2018



Ham radio will always be a hobby where those engaged are practicing to help if the need ever arises, whether they participate in public service events with local clubs or not. And younger operators are redefining how it's done with new digital technologies — and that's a great thing! Millennials are not killing ham radio... they're the future

Some ham radio operators believe younger hams are “killing” the hobby. These often dismissive and vile opinions are not great for the future of amateur radio. Integrating new technology like VOIP and microcomputers into amateur radio is what it's all about—using the resources available to communicate and exchange information with others around the world. Who cares how we get it done? Getting young kids involved in ham radio

We must get children interested in the hobby. Today, kids aren't impressed with the ability to talk around with the world on 100 watts and a wire. They're just not. How do we get young people interested in the digital age where they can communicate anywhere in the world with a tap of a button? The ARRL hasn't done a great job in attracting young people — but there are things we can do! Capitalize on the next generation of space exploration

The United States is embarking on the next generation of space exploration. Companies like SpaceX and Blue Origin are making space and engineering cool again, and ham radio could easily ride that wave. Focus on targeting kids interested in Science, Technology, Engineering, and Mathematics and educate them on AMSAT and the potential to communicate with the International Space Station (ISS). Using space exploration as a drive for getting a ham license would be a fantastic entry point for space geeks everywhere. Use remote HF and SWL stations to spark interest

For young ham radio operators who already have their license, look no further than Remote Ham Radio as a shining example of how to get kids interested in upgrading their license. They offer a program where kids can win free time using world-class remote DX contest stations. The young hams have to meet the following criteria:

- Be 25 years old or younger
- Hold a General class or higher license
- Be a member of the ARRL
- Have an interest or experience in DXing/Contesting
- Tell us why RHR would be a good fit for you

Kudos to Remote Ham Radio for offering this program to young hams! POTA/SOTA combines ham radio and outdoor adventure

Living in Colorado, I grew fond of Summits On The Air (SOTA) rather quickly. I mean, it's cool. You can exercise while playing ham radio all at the same time. We should be focusing on how we can use these outdoor portable operations to attract young hams who love the outdoors. For the extreme outdoor enthusiasts, it would be wise to focus on the usefulness of being able to communicate from the wilderness where cell phone signals are non-existent.

Ham radio has evolved, albeit slowly compared to other technology sectors. That evolution is inevitable. We can't fight it. We shouldn't fight it. We need to find ways to encourage new exploration of communication methodology. That all starts with younger ham radio operators bringing new ideas and skills to our hobby.

Let's not fight it. Let's embrace it. 📡



## Club Apparel

Want a shirt, jacket, hat, sweatshirt or t-shirt with a Great South Bay club logo? We now use *Mr. Shirt*, located at 80 East Montauk Hwy. in Lindenhurst ([www.mrshirt.com](http://www.mrshirt.com)). Now you can get color matched backgrounds on your logo too. Check them out... ☺

## ARES/RACES Information

### Div. 1—Town of Babylon ARES/RACES

Net: 146.685/R, Mondays 8:15 PM  
EC/RO: John Melfi, W2HCB, (631) 669-6321

### Div. 2—Town of Huntington ARES/RACES

Net: 147.210 MHz +600/ PL 136.5,  
Mondays 7:00 PM  
EC/RO Steven W. Hines, N2PQJ,  
<http://www.huntingtonnyaresraces.org/>

### Div. 3—Town of Islip ARES/RACES

Mondays 8:30 PM  
EC/RO: Philip Jacobs, W2UV, 631-838-2500

### Div. 4—Town of Smithtown ARES/RACES

Net: 145.430 MHz, PL136.5, Mondays 7:30 PM  
EC/RO: Rich Johnston, KC2TON, 631-872-4039

### Div. 5—Town of Brookhaven ARES/RACES

EC/RO: Ted Debowy, AC2IR, 631-751-6576

### Div. 6—Riverhead ARES/RACES

EC/RO: Steve Casco, W2SFC, 917-701-3919

### Div. 7—Southampton ARES/RACES

EC/RO: Removed & Currently Vacant

### Div. 8—Southold ARES/RACES

EC: Don Fisher, N2QHV, 631-765-2757  
RO: Charles Burnham, K2GLP, 516-779-4983

### Div. 9—East Hampton ARES/RACES

EC/RO: Eddie Schnell, WZ2Y, 864-973-9250

### Div. 10—Shelter Island ARES/RACES

EC/RO: Vacant (Neal Raymond, N2QZA, SK)

### Suffolk County

### ARES/RACES Net:

Mondays 2100 Local—145.330/R (136.5 PL)

Alternate Frequency—146.820 (136.5 PL)

### New York State

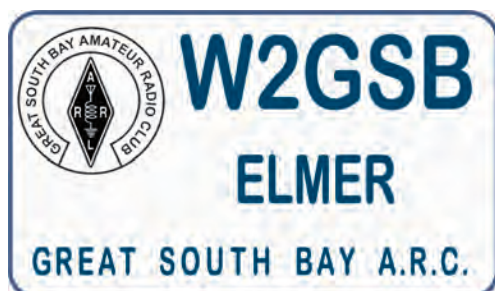
### RACES Net (HF)

Sundays 0900 Local, 3993.5 KHz LSB

## Club Name Badges

Club name badges are available from **The Sign Man** ([www.thesignman.com](http://www.thesignman.com)) of Baton Rouge, LA.

The badges which are 1-3/4 in. x 3 in. If you visit The Sign Man's webpage you can order the badges by using a drop down selection on the orders page and clicking on "Great South Bay ARC—NY" ☺



# 2020 VE Session Dates

- March 28th
- April 25th
- May 23rd
- June 20th
- July 25th
- August 22nd
- September 26th
- October 24th
- November 28th
- December 26th

**CANCELLED**

All sessions are at the Town of Babylon EOC at 10 a.m., located in the basement in the rear of town hall. Please bring photo ID, a copy and your original amateur radio license (if you have one), and any CSCEs you may have. Non programmable calculators are allowed. The exam fee is \$15 payable by cash or a check made out to "ARRL VEC."

Visit [FCC Universal Licensing System site](http://www.fcc.gov) to register for an FRN number to use on the paperwork.

## The GSBARC Repeater List

146.685 W2GSB -shift 110.9 Hz  
Enc/Dec

146.685 -shift 127.3 PL (south input  
LINKED to 146.685)

438.475 WB2QGZ -shift 110.9 PL  
LINKED TO 146.685

223.860 W2GSB -shift 110.9 PL Enc/  
Dec w/ECHOLINK

223.860 -shift 156.7 PL Enc/Dec  
Local use

440.850 W2GSB + shift 110.9 PL  
Enc/Dec

446.775 KB2UR -shift 110.9 PL  
Enc/Dec Fusion Steerable

927.3125 W2YMM -shift D606 Enc/  
Dec

440.250 W2TOB/B + shift DSTAR  
REF020A Babylon

147.255 WB2TOB/C + shift DSTAR  
Steerable

445.725 WD2NY/B -shift DSTAR  
REF020A Selden



*Who remembers our July Custer Institute Special Events?*