



The Compass!

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

March 2018

Volume 46

#3

**Next General Membership
Meeting: Thurs., Mar. 29th, 8 PM**

**GSBARC Free Ham Radio License Classes! Amateur
Extra License Class Tuesdays 7 - 9:30 p.m.**

The ARRL International Grid Chase

Current Flow in Doped Silicon

Lost QSL's? Don't Give Up!

School Club Roundup 2018

KB6NU's Guest Column



Long Island's Friendliest Amateur Radio Club!

President's Message



As I started this month's message, it was raining. Just a little over a week ago I was away in the Caribbean in the warm weather. It's always great to come back home but of course what happens is it is always mild when I leave, then after I get home the weather seems to take revenge on me, this time serving up a nor'easter! My weather station was showing 25 mph sustained winds and one gust of 65 mph from the NNE. The rain total was 3.65 inches. Just think about this: the barometer was at 29.30 when I started this on March 2nd. It is now March 3rd and it's at 29.83 and going up. There were several nets on the air from the Nassau County Skywarn group. The Town of Babylon net was held on our 2 meter repeater and we also posted weather reports digitally. The Town of Huntington also held nets during the nor'easter. Our weather system on Long Island can be different all over the Island. I know W2JV Pete reported that he had more than 4 inches of rain in East Northport. Right here in the Village of Babylon, the east end of the village at Montauk Highway and Cooper Street was under 3 to 4 feet of water between 2:30 and 6:00. I hope everyone fared well.

As we get ready for the season of special event stations, and of course Field Day, we once again have a lot of work to do. Following last year's Field Day some equipment was not put away correctly and we noticed a few things missing from some of the HF radio kits. In the upcoming weeks we will be doing a complete inventory and inspection to account for all our equipment located at the EOC and in the trailer. This way when Field Day arrives we are not scrambling at the last minute to find a cable or whatever.

I know we all like the fun stuff amateur radio has to offer—myself included. Emergency communications and public service events are what keep amateur radio in the public's eye. To those who always show up during emergencies and public service events I would like to thank you very

much for all your help. The Babylon ARES which is made up from many members but our club can always use some more reliable operators. Some people relocate and we need operators to replace them. What does it take? For the ARES group, which is a local group, not too much. A good mobile station and home station as well as an HT. As you get more involved you can always add equipment as needed to make it easier for yourself. We have go kits for remote locations such as shelters or wherever else we may be needed. These kits are not low-end equipment: they have 2 ICOM radios—an IC5100 and IC7100—along with a power supply and all necessary cables. This way you do not have to rip your station apart to equip a location. If you think you would like to be part of the ARES group please email me at w2hcb@arrl.net.

In case you did not notice, we left the Yahoo groups and moved over to Groups.io because of problems we had with the Yahoo groups. You should have received an email to let you know that you were automatically added to the new group. Just go to Groups.io and sign up for a free account to manage your subscription(s). Many of the other Yahoo groups are making the changeover as well.

On Monday nights we have the GSBARC info net on the 2 meter repeater and we've changed the way it's run. Now we announce the week ahead special events followed by the contest report by either Salli, K2RYD, or Tom, KA2D. Next up is the DX report for all the DXers from the one and only Bob, K2TV, who follows up with Amateur Radio Newslines.

We are so sorry to hear about the passing of Tom, KA2D's mother. I remember the time she came to the lighthouse with him and talked with a lot of us and had a great time. She will be missed by all.

Some of you are probably wondering why we moved the February general meeting to March 1st. I have sent an explanation out as a message in the new Groups.io page for all current members to read, so see my message there. If you were at the general meeting you already know what's going on.

Now I must talk about what to do when there is jamming on any of our repeaters. The best thing you can do is this: do not pick up the microphone! Just listen and if you can record it, great. Make a note of the date, time, and which and repeater or frequency you heard it on. You can submit a report of it on the NLI section webpage. *Please do not engage the jammer.* I can't stress that point enough. We need everyone's help to stop jamming no matter where you hear it so please don't ignore it. Report it!! If you are in a QSO and the jamming starts just clear. Tell the other party in the QSO you have to clear. "I have a land line" or "I just pulled up to my destination," or something else along those lines. Then make a note of what happened. If you engage the jammer it just makes it worse. Once you have

the information you can then go to this link to report it. <http://nli.arrl.org/end-hudson-jamming.html>. This is the best way to handle it.

Another thing: don't talk about it on the repeaters where there was jamming and don't threaten the jammer. It just fuels them up to keep on going. So everyone please help stop the jamming.

It is good to see more and more people getting involved in digital communications. We can sure use some more people involved to help cover all of Long Island. If you need help getting your equipment configured we have many people available to help you get started. We are all here to help each other experience all the fun that amateur radio has to offer. Also, if you got a new mobile radio or antenna and need help installing it we also have many members who are willing to help with that as well.

The warmer weather is eventually starting to arrive and you know what that means: antenna projects! Aluminum palm trees start to take shape. I know of one our members who went antenna crazy. Charlie N1RR has once again built another antenna farm, if you have seen the pictures you know what I mean. I know those who saw the video of that huge tower falling to ground were horrified to see it crash and destroy those beam antennas. No worries as he stated now he has plenty of aluminum for other antenna projects. How would you like 3 to 4 beverage antennas for receiving? Or a 100-foot-plus tower with stacked Yagis? Charlie N1RR is one of the top contesters in amateur radio and always at the top of the scores and always in the top 5. I am emailing Charlie to send us an article on his antenna project for all of you to see for yourselves.

Kevin, AB2ZI, who runs our education program, has trained many people to get their amateur radio license and many more to earn upgrades. His teaching style is unmatched. We get so many compliments on how great the class was and how Kevin makes it fun and offers so much extra help if needed. No matter what, if you have trouble understanding something he will help you until you do. I was thinking of the number of operators who have gone through all 3 classes—it has to in the hundreds or maybe over the course of all the years it is now most likely in thousands! If you need to upgrade or know someone who wants to get started, check the class schedule and email AB2ZI kmorgan6@optonline.net. Kevin also puts together our newsletter so if you have something to share please send an email to info@gsbarc.org so it can be edited. If you have pictures to go with it, great. We always like when our members become involved in our newsletter.

Membership is the key to every club. The most important thing is to make sure all of our members are happy. The executive board and I welcome all suggestions and comments you have so please email us at info@gsbarc.org.

In closing I would like to thank everyone that has helped the club be what it is today. I know that many of you have spent countless hours on projects and dealing with business for our club. I thank you all very much it goes without saying that your help has enabled our club to grow and grow.

I hope to see many you at our open houses and meetings. I sometimes have a very busy work schedule and traffic is not getting any better these days. If you don't know, I travel all over the tri-state area chasing construction equipment now for more than 25 years. Before I forget I am putting in the request for two, (yes WB2QGZ I said two!) 135-foot booms for Field Day. I don't know for sure if I can get two, but I am going to give it a shot.

I hope everybody has a great month and has a lot of amateur radio fun no matter what you consider fun: DXing, contesting, rag chewing, kit building, antenna installations, whatever. We are so fortunate to have such a great membership working together to help each other and to make GSBARC a very friendly inviting club for everyone to enjoy.

73. John Melji, W2HCB 📻

***GSBARC 2018 Field Day Raffle
Tickets now available for our newest
club fund raising raffle. Help keep
our dues at their current level and
have a chance at 2 great prizes.***



***First prize is a Yaesu FT-891 HF/6M mobile
transceiver****

***Second prize is an ICOM ID-5100A VHF/UHF/
DSTAR mobile FM transceiver****

***Donations are \$5 per ticket or a book of 5 tickets
for \$20 — the best deal!***

***Drawing to be held during Field Day dinner
barbecue on Saturday June 23rd.***

****Winners need not be present to win and may choose the
cash value of the prize in lieu of the prize itself.***

Which Way Does Current Really Flow?

By Dan Romanchik, KB6NU



I was recently taken to task by one of my blog readers regarding my description of current flow in my No Nonsense Technician Class License Study Guide. He wrote:

“You casually say that current flows from Positive to Negative (with cool accompanying directional arrows), without any accompanying qualifying statement. Over the years I have looked at ALL the views on the subject. Positive to Negative is NOT what I was taught 48 years ago, and I have never seen a good reason to change my view.”

In a subsequent email, he pointed me to a Nuts ‘n Volts article, “Which Way Does Current Really Flow?” (<http://www.nutsvolts.com/magazine/article/which-way-does-current-really-flow>) and asked my opinion. In the article, the author, who is a ham by the way, does a good job of explaining the various types of current flow.

I agree that in electronic circuits electrons flow from negative to positive, but it really doesn’t matter. I agree with one of the article’s commenters who says,

“This is a silly argument. It’s like comparing apples and oranges and challenging people to take sides.

“Electron flow is not current flow. Electron flow is easy to understand, an actual physical property, and a real help in understanding vacuum tube operation. But it falls apart when one needs to understand complex electronic systems.

“[Conventional] current flow is a mathematical abstraction. It is defined as a net flow of positive charge, irrespective of the polarity of the physical charge carriers — whether electrons, holes, positive or negative ions, or whatever.

“When looking at any circuit containing a resistance with a voltage across it, conventional current through that resistor says that the voltage drop occurs as the current through it meets resistance. On the other hand, in negative (electron) flow, a voltage INCREASE will correspond to the ‘current’ flow through it, clearly violating physical laws. Conventional current flow is consistent with the laws of physics and those of other engineering disciplines.

“You are correct that engineers, professors and scientists use conventional current flow. That is not because they are too obtuse to understand electron flow; I assure you they fully understand it. It is because in their world they have to solve more general problems involving complex math and science, and, again, conventional current flow is consistent with physical laws.

“It is unfortunate that electron flow and current flow are so often confused. They both have their place.”

After reading that article, I thought I’d see what the ARRL Handbook has to say about current. In the 1963 edition, they don’t mention electron flow at all. They have one diagram showing the direction of current flow in both series and parallel circuits, but the voltage source has no polarity. It’s simply labelled “Source of E.M.F.” Diagrams giving practical examples of series and parallel circuits do include a battery, and if the reader were to mash up the two diagrams, they would conclude that current flows from the positive terminal to the negative terminal.

The most recent edition of the Handbook that I have is the 2005 edition (it might be time to get another copy!). It says,

“Electrons move from the negative to the positive side of the voltage, or EMF, source. Conventional current has the opposite direction, from positive to negative. This comes from an arbitrary decision made by Benjamin Franklin in the 18th century. The conventional current direction is important in establishing the proper polarity sign for many electronics calculations. Conventional current is used in much of the technical literature. The arrows in schematic symbols point in the direction of conventional current, for example.”

Having said all that, I really don’t see that there’s much of a controversy here. I did learn to think of current as conventional current in college, although it was mentioned that electrons actually flow in the opposite direction. Using the concept of conventional current has never seemed to hold me back. I’ve been able to design circuits and repair electronic equipment thinking that current flows from positive to negative.

Continued on page 7...

Never Give Up on a QSL Card

By Urb LeJeune W1UL ©2018 all rights reserved.



Introduction: at a recent club meeting one of the members was complaining that he had sent a QSL card with some green stamps and it was six months and he had not received a QSL card. After I stopped laughing I tried to explain that hams today are spoiled with instant confirmation. Using LoTW it is frequently possible to receive credit for a contact with a DXpedition while the operation is still active.

VP8BK South Georgia: To make my point I pointed out that in the “good old days” it was not unusual to wait years to get a QSL from a rare station. In the fall of 1956 I worked VP8BK on South Georgia. The operator was Einar LA1RC and he had recently arrived for a one-year tour on the frozen wasteland. There would be no QSL cards until he returned home at the end of 1957. I dutifully sent my QSL, along with a green stamp. In late 1958 I received the VP8BK card, however, there was a problem, Einar had interposed my call sign, it read W2DCE and I was W2DEC at the time. The fact that the QSL said “thanks Urb” and there was no W2DCE at the time did not sway the ARRL DXCC desk. Another QSL, green stamp and a restart of the patience stop watch. In due course I received a new QSL with a corrected call. After almost three years after the QSO I finally had South Georgia confirmed. This was not the longest wait, hold onto your seat. First a little background.

Background: In the annual DXCC listing in the December 1964 issue of QST I was one country off the top of the honor roll, as W2DEC. There were only 149 people worldwide who were on the honor roll and I was number 25 on that list. My missing country was VK0 Heard Island.

I started drifting away from active DXing for a few different reasons; the main cause was the rapid emergence of lists. You had to cozy up to a list manager and get a number. Contacts required no operating skill. I took up other challenges including making Five Band WAS with only 50 operators with 1 X 2 calls, No special endorsement.

VK0CW Heard Island: In early February 1983 I was visiting my very dear friend Phil W2LNB who is now a

SK. Phil casually mentioned he finally worked VK0CW on 80 meters to which I replied, “Heard Island?” Phil said they were easy to work on 20 meters. I headed home and fired up my rig and loaded my antenna and everything seemed to be working just fine. That evening there they were with an honest S9+ signal and I worked them on the third call. Several new countries were added to the ARRL list during my extended DX hibernation so a card from VK0CW would no longer put me on the top of the honor roll and put off sending for a card.

Fast forward to 2009 and I have a new job, new wife, new QTH and antique radio gear. I was then 46 countries off the bottom of the honor roll. I sent a VK0CW card to Dan N2DT who was the QSL manager for North America and a few days later Dan sent a note informing me that half of the VK0CW paper logs and QSL cards were destroyed due to flooding in his basement.

Dan was very friendly with North Jersey DX Association (NJDXA) NJDXA member Elliot W2DIE. At a NJDXA I was telling Elliot about Dan’s letter. Elliot told me he would go to Dan’s basement and rummage around looking for logs and QSL cards.

On December 22, 2010 I received a letter from Dan as follows:

Hi Urb:
Merry Christmas:

As you know about half of the paper logs were ruined about 10 years ago due to flooding in my basement. In addition, I didn’t recall having any more VK0CW QSLs.

But because of my affection for Elliot and the NJDXA Elliot and I dug through the water-distended packages and found an entry for you. Elliot and I then tore apart my store room and came upon three blank QSLs!

Enjoy.

73 Dan N2DT

Epilog: So there you have it. VK0CW QSO on Feb. 1, 1983
VK0CW QSL received on December 24, 2010, almost 28



years later. Keep this in mind the next time you’re tempted to complain that it took you a year to get a new country confirmed.

73 Urb W1UL urb@ham-cram.com. 📧

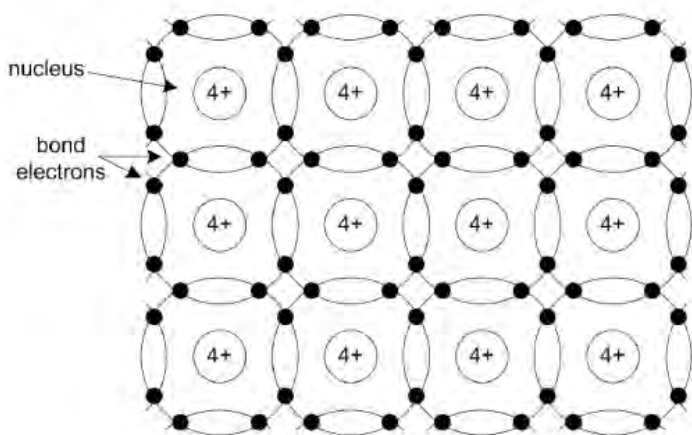
In the Classroom with AB2ZI

Current Flow Through P and N Type Semiconductors

By Kevin, AB2ZI

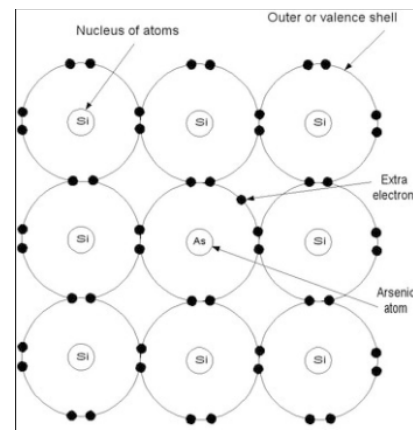


In solid state electronics we are introduced to semiconductors and the concept of *doping*. So what is this all about? First, let's take a look at a crystal made up of pure silicon atoms.

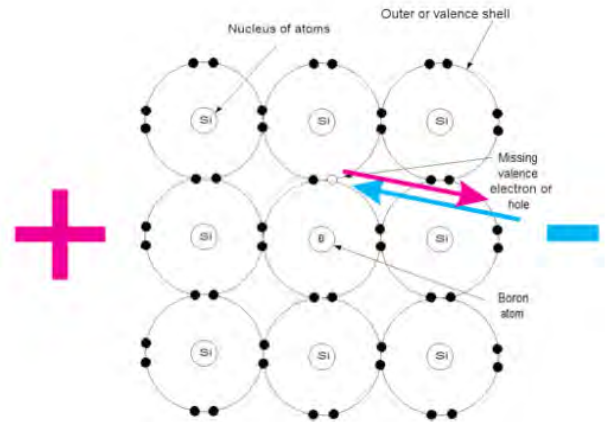


The outer shell of Silicon has 4 electrons in it. When silicon is in a crystalline state, the outer orbits share an electron with each other giving each atom 8 electrons in their respective outer orbits.

In order to make silicon useful for electronics, a process called doping is used wherein some other atoms are added to the silicon. These atoms will have either an extra electron in their outer orbits—arsenic, As, and antimony, Sb, each have 5—or they may have 1 less electron in the case of both gallium, Ga, and indium, In, which each have 3. These elements are added in kind of like putting salt or pepper on your food.

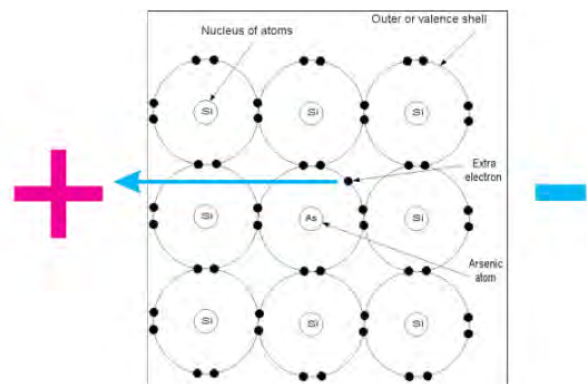


Here we see a crystal of silicon with arsenic atoms added. The extra electron in the outer shell of the arsenic atom is not used in the bond with neighboring silicon atoms and so is an extra, or *free*, electron. Because this crystal has an extra electron it is called the N-type material (*N* for negative) and if a voltage is applied that free electron is repelled by the negative charge and attracted to, and moves toward, the positive charge.

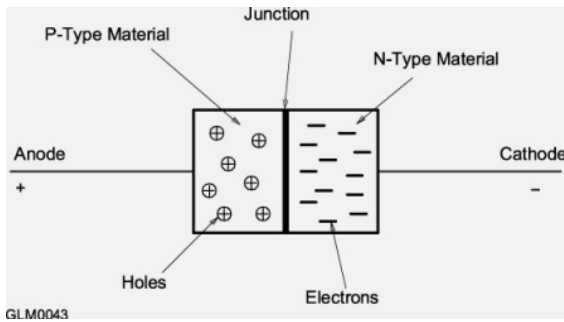


If instead we dope the silicon with gallium or boron, we then get a hole in the bond where the missing electron is. This is a P-type material.

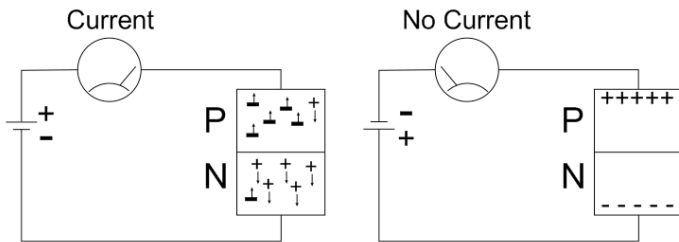
When a voltage is placed across this P-type material, the positive charge attracts electrons and as free electrons move toward the positive charge they move into the hole which leaves a hole in the atom that electron moved from. As electrons move into the holes the holes move in the opposite direction.



When these P- and N-type materials are joined together they form a junction between them. With no voltage applied the free electrons in the N material drift across the junction to fill the holes in the atoms nearby. This creates a *depletion region*, or a kind of no man's (no electrons) land at that interface between the materials. This PN junction is called a diode and it will only allow current to flow in one direction.

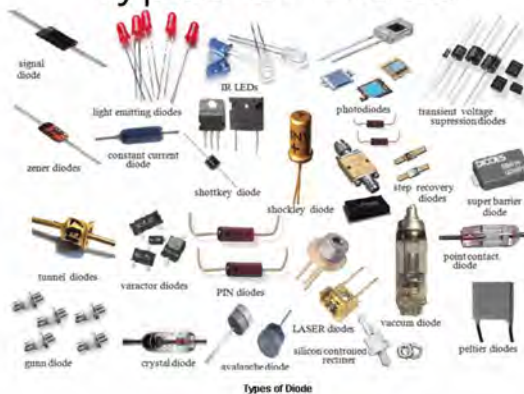


Because of the barrier region, the applied voltage must exceed 0.6V to 0.7V (0.2 to 0.3V for germanium diodes) in order to get current flow. When the voltage is attached negative to the N and positive to the P material, the negative voltage repels free electrons in the N material which are simultaneously being pulled toward the attractive positive charge on the P material—current flows and all is good.



If instead the opposite voltage polarity is applied, negative to P and positive to N, then the positive side pulls all the free electrons to itself while the negative repels them. The result is that most of the diode becomes one giant depletion region and current cannot flow. The diode is said to be *reverse biased*.

Types Of Diode



Which Way Does Current Really Flow? cont'd from page 4...

Although it's a departure from my "no nonsense" style, I am thinking of including a sidebar, similar to the paragraph above from the 2005 Handbook explaining the two ways of looking at current flow. What do you think?

When he's not trying to figure out which way current flows, Dan blogs about amateur radio at KB6NU.Com, teaches ham radio classes and operates CW on the HF bands. Look for him on 30m, 40m, and 80m. You can email him at cwgeek@kb6nu.com.



The ARRL International Grid Chase is underway! Join in on our newest year-long operating event!

You may not know this, but your station is in a Maidenhead grid square. The entire world is divided into thousands of these 1° latitude × 2° longitude squares, each one with a unique designation. They're all part of a geographic location system adopted in the 1980s at a meeting of the VHF Working Group in Maidenhead, England.

Unless you are a VHF enthusiast, this nugget of information may not mean much. But at 0000 UTC on January 1, 2018, the global Amateur Radio community came alive with the exchange of grid squares.

For more information on grid squares see <http://www.arrl.org/grid-squares>

Get in the Chase

The objective of the ARRL International Grid Chase is simple: Work stations in as many grid squares as possible and upload your log data to ARRL's Logbook of The World (LoTW). If you are not currently registered with Logbook of The World, this is a good reason to get started. Go to <https://lotw.arrl.org/lotw-help/getting-started/>. Registration and uploading are free. When registering and setting up your Station Location, be sure your TQSL Station Location includes your Grid Square!

For more [visit the ARRL here.](#)

School Club Roundup February 2018

By Ben, K2CPU



Hello everyone, a few people from my high school, the West Islip High School, had a great time operating the ARRL School Club Roundup contest, for the February term in 2018. A lot of fun was had by all. Band conditions weren't that great, but we made do.

We spent the week before the contest setting up our somewhat temporary station. We spent the first two days setting up logbooks and software, we used N3FJP's School Club Roundup Contest Logging Software and we also installed WSJT-X and FLDigi on our "shack" computer that we borrowed from the computer repair class. For the antenna, we were planning on building a fan dipole for 20 and 40 meters and installing it on the school roof. So around lunch time, we started cutting the wire for the lengths of 20 and 40m, then later that night at Open House, Walter KA2CAQ lent a pre-tuned, 40m dipole antenna for us to use during the contest. We soldered on the 20m element and mounted the newly built fan dipole on the roof. I brought in my MFJ antenna analyzer and tuned it; it worked fairly well, with a 1.5 SWR on 40m and a 2.8 SWR on 20m.

I would like to thank Fred K2LDC for donating the Johnson Viking Matchbox Antenna Tuner to help tune the antenna; it worked very well. While our trustee Mr. Buonomo KD2FKP and the custodians were busy mounting the antenna on the roof, I went around and tried to recruit other students to participate in the contest. I "rounded up" - see what I did there :) about 8 students, and we formed a GroupMe chat to help communicate between all of us. After school those days, I was interviewed by Neil Rapp WB9VPG from Amateur Radio Newline (ARN), and we discussed our operating plans and future plans for the school club. This discussion was then turned into a segment on ARN, Report #2102. I was also featured on the ARN Headlines on Ham Nation later in the week. Thank you to Caryn Eve Murray KD2GUT for organizing it all and assisting with everything.

Then it soon became Friday and I spent the weekend anxiously waiting to get going in the contest. During seventh period Monday afternoon, we connected all the coax, tuners, computers, etc. I was the only student in our temporary "shack," aka a Computer Cart in the Engineering Technology Office, and we designated the day for setup. We turned on the radio, and there was a fairly high noise floor, S7 on 20m. Next, I gave Mike KC2SYF a call, and we tested the radio on both SSB and on FT8 after we setup the software. He said it sounded good, so we go do a little FT8 because of the noise floor. We worked a few stateside stations and one from France, so we knew it was working! Even though FT8 didn't count for School Club Roundup, it was nice to get some contacts in the log.

On Tuesday, we turned on the radio and called CQ SCR for a little while, and not a single person came back to our CQ. Keep in mind that conditions were horrible that week. We tried again on Wednesday and made a few more contacts. We had my friend Liam, who is interested in getting licensed now, as the operator for the day, but did not end up making many contacts. On Thursday, Liam tried again and we heard the strongest signal of all. It was Phil KD2GFO, with a nice 50 over S9 signal, mostly because he was only less than a mile away :).

On Friday, I spent the operating period trying to work other School Club Roundup stations. I was fairly successful. By the time the contest was over, there were about 100 SCR Contacts, and a few others in the log. The next day we submitted the logs and uploaded them to the QSL services. Anyone who worked us should get a confirmation on LoTW, QRZ, eQSL and Clublog. Feel free to send direct QSL cards if you would like. We are in the process of printing some up. Our total score was 2,244. Two weeks later, we got the results back. We came in 10th place in the Senior High School division, which wasn't bad for the first time. It was also nice to activate the school for the first time, as it has never been on the air before. For the next term of School Club Roundup in October, we hope to get some kind of antenna that is a little better and higher; our custodian really enjoyed putting up the dipole on the roof, and he says he wants to put up more! We are even considering a beam of some kind, but that is far down the road. We also hope to get an HF radio that we can keep permanently at school, as we borrowed our trustee's brand new Icom 7300. We would also want to put it in a more permanent location and get it off a cart in the Technology Office. Now, we want to put a VHF/UHF antenna on the roof too. Huge thanks to John W2JGH for donating his Icom IC-208H and 12 amp power supply. We will put it to good use :) Overall, a lot of fun was had by all. I would like to say thank you to all who supported and worked us throughout this event, Mr. B, KD2FKP our trustee for organizing this whole event, Mike KC2SYF, Walter KA2CAQ, John W2HCB, Fred K2LDC, and the entire ARN and Ham Nation crew for all the support and publicity. 🙏

GSBARC is no longer using Yahoo Groups due to issues with the platform. We have transferred everyone over to <https://groups.io/>

If you were a member of any of the Yahoo groups just sign up for a free groups.io account and you will have access to the new groups. [Groups.io](https://groups.io/) has most of the same features as the Yahoo groups and some additional ones as well, like the ability to have live chats. ☺

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). 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: John J Blowsky, KB2SCS, 631-467-2410

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: Dennis O'Rourke, KB2ZWW, 631-728-5424

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: Nat Raynor, N2NEL, 631-324-3738

Div. 10—Shelter Island ARES/RACES

EC/RO: Neal Raymond, N2QZA, 631-749-9330

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

2018 VE Session Dates

- March 24th
- April 28th
- May 26th
- June 16th
- July 28th
- August 25th
- September 22nd
- October 27th
- November 24th
- December 22nd

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 CSCE's 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

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

223.860 - shift 156.7 Hz Enc/Dec Local use

440.850 W2GSB + shift 110.9 Hz Enc/Dec

446.775 KB2UR - shift 110.9 Hz Enc/Dec

927.3125 W2YMM - shift D606 Enc/Dec

440.250 W2TOB/B + shift DSTAR REF020A Babylon

445.725 WD2NY/B - shift DSTAR REF020A Selden

Grow Giant Vegetables with **MAGIC MANURE**, manufactured daily on the farm. 40-50lb bags free for the taking, already bagged. Pick-up or Delivery to EOC available. References available upon request. Contact Salli at:

k2ryd@arrl.net.



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Club Name Badges

Club name badges are available from *The Sign Man* (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" ☺

