THE COMPASS

Official Newsletter of the Great South Bay Amateur Radio Club

May 2016 | Volume 44 | Issue #5

Upcoming Club Events

Next General Meeting:
Thursday, May 26th, 8 PM at the EOC

Next Special Event: American Air Power Museum Armed Forces Day Weekend May 21st and 22nd

GSBARC's FREE License Classes Tuesday nights 7–9:30 PM. Currently Running. Technician License Classes

Open Houses on Wednesday nights from 7:30 to 9:30 p.m. and also Saturdays from noon to 3 p.m

Visit us on Facebook at www.facebook.com/gsbarc

Bob Fischer K2ND was the guest speaker at the April GSBARC general meeting. He spoke about the importance of the Amateur Radio operators who volunteer to provide communications for the Maggie Fischer Cross Bay Swim. We really don't realize how important Amateur Radio is to the safety of the participants. Bob pointed out that the swim could not take place without our help. The sponsors of the race really depend on our participation—on the boats as well as on the shore. This year's event will take place on Friday July 22nd starting at 6 AM—additional photos on page 5

Inside this issue of The Compass...

Upcoming Special Events

American Air Power Museum Special Event - May 21-22

Field Day - June 25-26

Maggie Fischer Memorial Cross Bay Swim. Friday July 22nd

Fire Island Lighthouse Special Event August 13-14

President's Message

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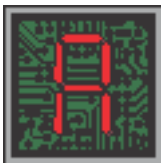


s I sit to write this month's message, I am thinking of all the work we have ahead of us before Field Day.

To all of our new members: Welcome to the Great South Bay Amateur Radio Club! We look forward to seeing you at the meetings, open houses and our events.

This month, we have the American Airpower Museum event in Farmingdale on the 21 and 22. It's always a great time: We'll have two stations, 20 meters and 40 meters. Please touch base with K2TV for setup details.

The repeater crew, headed by WB2QGZ, is working on building the new 685 repeater and other projects.

We still have work to do at the EOC. Now that weather might be getting better, we can get started on our many projects.

As for Field Day, last year, we had great success due to the crazy several weeks of prepping all of the equipment and testing all the feed lines computers, etc. We will be starting and testing the big boy generator with the trailer and doing a full inventory of the contents of the job boxes and contents of the trailer.

We will once again be 6F: 3 CW, 3SSB stations and the bonus station; VHF UHF satellite. The tech crew, headed up by KD2ADC, is doing a tremendous amount of prep work getting the tracking software going for the satellite station. Their hard work will make it easier for us to track those birds and get the bonus points for satellite contact.

If you are a newcomer to Field Day this year, or if you need a refresher on operations, we would like you to come down to the open houses during May and June to get a look at the logging software, N1MM.

If you have not tried out the new radios yet and need help, the open houses are a great place to learn about them. The north side will be using the ICOM 756 Pro and 756 Pro 2. There will also be a new IC 7600. On the south side, there will be an ICOM 7600 to 9100 and three 7600 radios.

To get a look at the radios, please go to the ICOM website and take a look at the operating manuals.

Setup will start at 6 a.m. We will need a good size crew to set up the towers and all the antennas.

If you are not physically able to do setup, no worries: We need operators. If you show up to operate on Saturday, you have no idea how important it really is. Without you, the crew who's been there since 6 a.m., can't get the break they need so badly.

Here's our timeline for Field Day:

- June 25 – Setup starts at 6 a.m. for towers and antennas.
- Unload trailer.
- Shelter setup, north and south (as you know from last year, we have to make sure we secure them.)
- After the towers, antennas and shelters are set up, we will then start setting up radios.

We will be on the air at 2 p.m. SHARP (that's 1800 UTC).

Safety is always a concern so if you are going to help set up the towers, please make sure you have a hard hat and a pair of work gloves.

John Melfi, W2HCB

QSL'ing Special Event Stations

By Bob Myers K2TV

There has been a large increase in special event stations in the past few years. Those operations celebrate just about any topic or event that you can name and there seems to be no end to the number of people chasing these stations. Most issue QSL cards and some even issue certificates for a contact. I have been a QSL manager for a couple of DX stations over the years and am presently QSL manager for the special event stations that The Great South Bay Amateur Radio club operates throughout the year. One would think that opening envelopes, reading the incoming cards, looking up the QSO in the log and filling out the outgoing card and putting the card in the outgoing envelope would be an easy job. In fact, you would think that it would be pretty routine.

Well it probably would be routine if every one that sent in the card would follow a set procedure. In the real world it doesn't work that way as there is no set procedure. So I would like to make some suggestions to make the QSL manager's job easier and to make sure that you receive your cards in good condition and with the proper information on it.

When QSL'ing a DX station or a special event station, a plain card is just as good as a fancy one. Most of these stations are largely not interested in receiving your card. They just want to send out the event QSL cards as quickly as possible. Your call should be in a prominent place and if it is a two-sided card, your call should appear on both sides. Your return address should be on the card. The form that contains the QSO information should have the date preferably in the DAY MONTH YEAR order. You should have the time in UTC, the frequency in MHz, the signal report and the mode. Time is always in UTC and never in

Continued on page 5...

Inside the Squirrel Cage

by Caryn, KD2GUT

This is Kilo Delta Two, Golf Uniform Tango. QSL?

Readers, I said: "This is Kilo Delta Two, Golf Uniform Tango. Can you copy?" Well yeah, I suppose, it's easy enough to copy me here – this newsletter doesn't present much of a pileup to break through, there isn't a noise floor and eventually, even if you copy everyone else in these pages before you get to me, you'll eventually get to me – that is, if you want to. I DON'T NEED TO TYPE IN ALL CAPS LIKE THIS, giving myself the equivalent of a linear amp so you notice me. I know you'll find me if you know where to look for me.

On the air, well, that's a different matter. In contests and with special event stations, my 100 watts often get stepped on more than your average cockroach. Squashed like a bug. I get buried more deeply than an acorn being entombed by a paranoid squirrel (with apologies to my gray buddies). By now I'm used to it. I operate a 100 watt rig and probably always will. (Sometimes I operate it at 30 watts, when I'm doing PSK and will use even less than that when I muster the courage to rock some serious CW.)

But I accept the challenge. It is making me a better listener and it is teaching me more about the importance of my antenna and the use of the filters on my rig.

So my once hopeful thoughts of ever firing up a linear amplifier have vanished as fast as the 10 meter band on a bad sunspot day. It's OK. After a year and a half on the HF bands (and nearly two years on the air), I've accepted 100 watts as my standard just as I long ago made peace with being a little shy of 5-foot-3 inches tall. That's the norm for me. And if my height is low power, why shouldn't my

Continued on page 5...

I'm EXTRA Ignorant

By Dan Romanchik, KB6NU

In Sunday, I received the following e-mail from a reader:

"Just wanted to let you know I passed the General exam using your study guide. It was very helpful. I am now generally ignorant whereas before I was only technically ignorant. Ha!"

My reply to him was:

"Well, if you're generally ignorant, I guess that makes me EXTRA ignorant!"

This isn't just a joke—being ignorant is part of the hobby. Amateur radio operators will always be ignorant about something or other. Even if you could master every facet of the hobby at some point in time, your mastery would be short-lived as the technology continued to advance.

Over the course of my amateur radio career, we've gone from equipment that primarily used vacuum tubes, to solid-state gear that first used discrete transistors and then integrated circuits, to software-defined radios. I could have, at some point, simply given up on the new technology and still enjoyed amateur radio. Some guys do that, and that's OK. It is only a hobby after all.

I'm not one of those guys, though, and if you're not one of those guys, then you have to resign yourself to being ignorant. But, that's a good thing, as long as you realize that you're ignorant. Realizing that you're ignorant will spur you on to learn new things and accept new challenges.

Recently, I realized that I'm mostly ignorant about satellite operation. I know some of the basics from having read articles and writing about the topic in my study guides, but I have never made a contact using a satellite. I think that might be one of my next challenges. With the advent of CubeSat, there are many new satellites up in the air and many more opportunities to have interesting contacts.

So, what are you ignorant about? By that I mean, of course, what's going to be your next challenge in amateur radio?

When he's not challenging himself with new things, Dan falls back on something he knows pretty well--operating CW. You'll find him mainly on the 80m, 40m, and 30m bands. Dan is the author of the "No Nonsense" amateur radio license study guides, and blogs about amateur radio at KB6NU.Com, and you can contact him by e-mailing cwgeek@kb6nu.com.

A Word to the Wise

By Urb LeJeune W1UL urb@w1ul.com

The FCC question pool for each class of license changes once every four years. This is the year for a change in the Extra class question pool.

The new question pool is more difficult than the current pool. The material covered in the new pool is broader than the material in the current pool. The new Extra class pool will be used for all Extra class VE exams taking place on or after July 1, 2016.

If there is an Extra class license in your future I would strongly suggest you start studying and take the exam during May or June. Start your studying at ***http://ham-cram.com***

QSL'ing Special Events... cont'd from page 3

local time. When transcribing from your log, make sure you put down the correct information. It is amazing how many people have the wrong time and date filled out on their QSL. Luckily having the ability to look up the station in question on a computer log makes it easier to find the correct information although not all special event stations log on a computer. Some stations actually give out a QSL number when you make the contact. Write it down and include it on your QSL card as it makes it easy to find your contact on a paper log.

Your QSL card should be no larger than 3 ½ by 5 ½ inches in size. The larger cards are nice, but make it difficult to handle, file and mail. I've seen QSL cards that were huge and required folding to fit them into an envelope.

Put your QSL card in a business-size #10 envelope with a self-addressed #6 (3 5/8 by 6 1/2 inch) stamped envelope. If the special event station stated they would be sending out certificates, then a #10 envelope has to be sent. Try not to fold the enclosed envelopes too many times as they are difficult to unfold and keep flat when mailing. I've seen a #10 envelope folded several times and a 3 ½ by 5 ½ inch QSL card will not fill it up causing the envelope to be mailed starting out in pretty poor condition due to the folds. One would wonder if it ever got through the postal machinery. Folding a #6 envelope in half and putting the folded envelope in another #6 envelope with a QSL card poses another problem. Many managers use an electric letter opener which could possibly slice the enclosed envelope in half.

When selecting an envelope for your return QSL card, use the self-sealing types. If your mail is sent to a manager in a humid area or your envelope gets wet, it makes a real mess for the manager. Even if it doesn't get wet, the glue-type envelope is a problem. I usually tape them shut rather than put up with trying to seal them successfully. After all, you are spending postage and return postage for your QSL confirmation and a few cents more for a self-sealing envelope is worth it.

Please take the time to write all your information legibly. Taking a little extra time to write all your information and return address clearly will assure that you will get your prized QSL card.

A final suggestion would be to include your email address on your QSL card. If the manager has a problem, a quick email to you can help resolve it in a timely manner.

Squirrel Cage... cont'd from page 3

shack have modest output too? (Think about it: If I were 5-feet tall or shorter, my output would have to be serious QRP).

It's all about comfort levels. As I learn to accept the fickle nature of the bands and learn the best way to time my calls, linear lust has become a thing of the past.

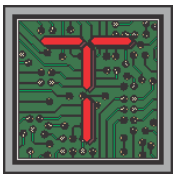
With good reason: My log shows I've worked Hawaii a few times. Eastern Europe. Israel. And just last month, I got a 5 and 9 from Casablanca. Casablanca!

Play it again, Ham. Play it. And when you do, you can be sure I'll keep my power at 100 watts – so be listening for me. QSL?

Maggie Fischer X-Bay Swim

In the Classroom with AB2ZI

What do you want to learn?



his is one of the questions I present mostly to the students in the Technician classes. What kind of ham are you looking to become?

I usually follow this with a pair of options. Option 1 is the person who is just interested in getting on the repeaters with an HT or mobile rig to pass time with friends while driving back and forth to work. Option 2 is the type of person who is interested in learning some electronics and moving on to General and maybe Amateur Extra.

Which type of ham you are looking to become is important to know up front because if you are looking to be an option 2 type of ham, it means I am going to be stressing a bit more math and technical material so you are ready to move up the ladder more easily.

For the option 1 types, I can recommend memorization of the more technical material and just give emphasis on those topics that will get you on the air responsibly and keep you out of trouble with the FCC and other hams.

Those who want to move up to General and Extra will find it much easier if you've been given a better foundation to build on. That foundation is built of understanding some basic algebra and number system concepts in addition to learning how to think more logically when approaching problems.

One of the things I really like is teaching how to more easily manipulate numbers. For example, using factors of 10 when you have to multiply or divide problems that would normally send you reaching for a calculator. These shortcuts, or manipulation systems, are things you can practice in your head any time you have some free time. The more you play with numbers the easier and more intuitive working with them will become.

As an example here's a real problem that you can play with:

- You have to buy some topsoil for your property and know that you want to cover the ground to a depth of 1 inch.
- Topsoil is sold by the yard, a yard being a cubic yard, or 3 feet by 3 feet square by 3 feet tall. Well, you cube 3 and get 27 cubic feet but that doesn't help you so you break it down some more.
- You know that the footprint of a cubic yard is 3 feet by 3 feet which is 9 square feet. You also know that 3 feet is 36 inches, so you have 36 one inch slices that each covers 9 square feet. OK, so the total coverage is 36 times 9 square feet.
- Here's how to do this in your head without breaking a sweat. Since 9 is 1 less than 10, and 10 is really easy to multiply by, we multiply 36 times 10 and get 360 square feet.
- Now that's 1 more 36 then we needed, and since 36 is almost 40 which is an easier number to subtract from 360, we do that. 360 minus 40 is 320 square feet.
- Since 40 is 4 more than the 36 we wanted to subtract from 360 we can now add that 4 square feet back in. So 320 plus 4 is 324 square feet and we have our answer! 1 cubic yard of topsoil will cover 324 square feet to a depth of 1 inch.

You can also use these tricks to estimate answers for tests when using electronics formulas. Say you are taking a test and there's a question about inductive reactance. They are asking what the reactance of a 2 microhenry inductor is at 3.5 megahertz. The formula for inductive reactance is 2π times frequency times the inductance of the inductor. If you understand how to work with scientific notation you know that multiplying megahertz by microhenrys means that the numbers are stripped of their mega and micro values, so we have 3.5 times 2 equals 7 which you can then multiply by shortening the 2π (6.28) to just 6 which gives you 7 times 6 equals 42. Your answer on the test is the one closest to 42 Ohms. The actual exact answer if you do it on a calculator is 43.96 Ohms.

Getting comfortable with tricks like these and learning, or re-learning, some of that high school algebra we've all forgotten 15 minutes after receiving our diplomas, not only makes the remaining license levels easier to pass, but an understanding of the mathematical relationships that the formulas present will give you a much better understanding of what is actually going on inside all those black boxes with the pretty lights and wires.

What about building stuff? There are a ton of DIY projects you can get involved with in amateur radio. There's antenna construction, test equipment you can build from

Continued on page 7...

The American Air Power Museum Armed Forces Day Special Event

by Bob Myers, K2TV

every May on Armed Forces weekend the Great South Bay Amateur Radio Club sets up a special event station at the American Airpower Museum. Located in a former hangar which housed part of the assembly line at the old Republic Aircraft, it is a treasure of old aircraft and artifacts. Most of the aircraft still fly and were built right at Republic and Grumman. The special event station was the idea of long time GSBARC member Charles "Bud" Egan, WA2QAV. Bud was retired from the US Air Force and was a volunteer at the museum. Last year Bud became a silent key and it was decided that the Armed Forces Day special event station at the American Airpower Museum at Republic Airport would now be called the Bud Eagan memorial special events station. Bud loved to show everyone around the museum and had stories about his long career in the Air Force.

If you are available on the weekend of May 21st and 22nd between 10 AM and 4 PM come on down and operate W2GSB. We plan on having two stations set up on 40 and 20 meters. If you are available on Friday May 20th, we are going to set up the station and antennas between 11 AM until finished.

The museum is located on the East side of the airport on New Highway in East Farmingdale. When you come into the museum gift shop, tell them you are with the Radio Club. If you can't come and visit, then please watch the DX Packet cluster for postings of our operating frequencies. Look for W2GSB on 40 and 20 meter SSB, but we may operate some CW. A special QSL card will be sent out for anyone making contact and sending a self addressed envelope to GSBARC, PO BOX 1356, West Babylon, NY 11704-0356.

In the Classroom... cont'd from page 6

kits, troubleshooting and repair of equipment, and now with the availability of cheap computers on a board like the Raspberry Pi and Arduino platforms, you can even get into building microprocessor based projects and programming.

You'll find a lot of great people to be friends with too. Some of the best friends I've ever made are hams. Hams love to share their knowledge and skills with each other freely. Most of us will go out of our way to help out a fellow ham in need and if that's your thing there are committees in most clubs that specialize in just that. Whether it's helping with hanging a dipole in someone's trees or putting up a tower—sometimes just helping an older ham move his thousand pound amplifier from one end of their shack to the other.

The bottom line is that there's no limit to how far you can expand your knowledge if you want to. You just have to figure out what it is that you like to do and do it!

See you all in class or at an open house soon...

YAHOO!

GSBARC has a New Yahoo Group and the old one has been deleted

If you are a member in good standing and want to join the club's new Yahoo group, go to:

https://groups.yahoo.com/neo/groups/gsb-arc/info

and click on "Join Group" Be sure to add a note when filling out your information with your call sign so we know who you are!

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, (###) ###-####
Div. 3—Town of Islip ARES/RACES
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: Joe Albertus , KB2JOE, 631-664-6709
Div. 5—Town of Brookhaven ARES/RACES
EC/RO: Ted Debowy, AC2IR, 631-751-6576
Div. 6—Riverhead ARES/RACES
EC/RO: < Unknown — no longer in state. >
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, N2NEI, 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. 5PL)
Alternate Frequency - 145.370 (136.5 PL)

New York State RACES Net (HF)

Sundays 0900 Local, 3993.5 KHz LSB

2016 VE Session Dates

- May 28th
- June 18th
- July 23rd
- August 27th
- September 24th
- October 22nd
- November 26th
- December 17th

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".

The Prizes for our next raffle.

1st Prize: Rigol 1054Z Oscilloscope

2nd Prize (left) MFJ-269C Antenna Analyzer
3rd Prize (right) Extech EX330 Digital Multimeter

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"

Need Antenna Work?

Sign-up on the list at the EOC. Please supply as much information about your situation so the committee can be properly prepared with assistance and tools when they come to your QTH.