



The Compass!

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

September 2025

Volume 53

#9

Inside this edition:

- **NOTE: All GSBARC Official Meetings begin at 7:30 PM!**
- **Technician License Classes Running Tuesday Evenings from 7 - 9 PM in the EOC and Running Through August**
- **POTA Activation at Hecksher Park: Sat. Sept 6th 10:30**
- **AB2ZI'S YouTube Picks**
- **Fire Island Lighthouse — International Lighthouse/Lightship Weekend**
- **Are Solar Panels Draining the Sun?**
- **GPS Rollover (Play Dead?) See If You're At Risk!**



POTA - Hecksher Park - Aug 5th, 2025



Fire Island Lighthouse



Long Island's Friendliest Amateur Radio Club!



Great South Bay Amateur Radio Club, Inc. Upcoming Meeting and Events Schedule



2025

- **September 6th** — POTA @ Heckscher State Park (10:30 a.m., to 4:30 p.m.)
- **September 25th** — General Meeting — Guest speaker: [WRTC](#) for 2026 with Mark, K1RX, a very well-seasoned contester and a past chairman of WRTC
- **October 19th** — Suffolk County Marathon
- **October 30th** — General Meeting
- **November 13th** — Board Meeting
- **November 20th** — General Meeting — Nominations
- **December 18th** — Annual Business Meeting and Elections

Subscribe to us on the Web at www.gsbarc.org

On July 26th, The Failing Data Dishes Were Replaced With A Waterproof Junction Box To Keep Everything Dry



PRESIDENT'S MESSAGE



The International Lighthouse and Lightship Weekend was on August 16. Thank you to everyone who helped get ready for this truly amazing event. The load-up on August 9 was done and we got everything ready to head out to the event on August 16. My truck was packed to the brim. We brought our club E-Z UP, two IC 7100 radios and the triplexer band pass filters. The antenna was the club's BuddiHEX being fed by brand-new coax, ABR240-UF.

Setup started at 7 a.m. Thank you to KD2X, W2KFG, K2ONA, KA2S, N2UIC, N2AMM, K2ND, W2YW, and KD2ZUT for setting everything up. We were ready by 8:30 a.m.

The conditions were not great. We ran mostly on 20 meters. The rest of the bands were horrible. Thank you to all our operators, NA2MM, KD2X, KA2S, K2RYD and NO2C. We made contacts on CW, SSB and FT8. We managed to get several other lighthouses and an even a lightship, a total of 204 QSOs.

We had a visitor stop by KD2PIH and brought some croissants with her. She asked several questions about our radio and club, and KA2S, W2KFG, and I explained the activities and aspects of amateur radio to her. She is going to try to come to our open houses to learn more. Members who made it to the lighthouse included KC2SYF, KC2CFA, KC2ZQO, KE2DFA.

Our takedown was done by only a small group of us: W2KFG, KD2X, KA2S, K2ND. Thank you all for help. Thank you to KD2ONC for taking all the pictures. Great job, Leon.

September is here! What a summer we had from events to work parties. Everyone who helped us did an extraordinary job. On behalf of the GSBARC board, thank you very much.

We really need more members to be part of our events and projects. We are still working on our remote station project. We are going to ramp it up this fall.

We will be posting the dates on the groups.io page. We can really use help. Not sure how you can help? Well, we can find the right task for you! We have a great team who you can learn from during the projects while working alongside our experienced members.

The Saturday Extra study sessions are doing well. AB2ZI has a group of operators who are studying to get their Extra.

We talked about another annual event to do: the W2TE Memorial POTA. We will do it in the fall. Not sure of the date yet. Stay tuned for more information.

Also, W2GSB is going to take part in the November sweepstakes this year as a club station. CW is November 1-3. Phone is November 15-17. We have three stations all ready for this first time as a club contest station operation. CW operators please bring your own key.

One of our biggest public service events is the Suffolk County Marathon!

Thanks to all our operators for your dedication and support for the past 10 years. If you would like your same posts, you have had please drop me an email at Suffolkcountydec@outlook.com and let me know as soon as possible. This event is huge for our club. It puts us in the spotlight with local state and federal agencies. The date is October 19 2025 and is a rain or shine event. All operators are on post at 6 a.m. and the latest post to secure is 2:30 out. The net control operators and I are on site at 5 a.m. and wrap up around 4 p.m. Yes, it's a long day but all those officials see how hard we work to help them out and it really pays off for us. If you're new to amateur radio, please give us a hand and help.

This is our club's motto: ***Provide Community Service At No Cost To The Taxpayers.***

It was set in stone when the club was formed in a dining room in Copiague in 1974 by our founding members. We still hold true to that when we do events to help out.

Amateur radio was first introduced as a service. Marconi had trained operators for ships and stations near the coastline, all over the world. Oh yes, we have a lot of fun parts of amateur radio as well. The fun part is the bonus part - from rag chewing, contesting, Parks on the Air to all the new modes that keep popping up. All the rage over new modes always calms down. We have all these fun things to do from our special event stations to our club contesting operators.

Winter Field Day was a blast. June Field Day was a bigger blast. We all had a great time. Our setup and takedown has been so impressive – and every time

Continued on page 4...

we do it, we get better at it. Our battery setup in the trailer makes it even better as we don't always have to run the generator. That has proven such a better experience for all our operators. As soon as we are done with setting up the antennas we are on HF. Our setup is usually done in about 30 to 45 minutes for HF operations. The BuddiHEX and end-fed dipoles have dramatically changed our workload.

We are always looking for presenters for our meetings so if you have someone in mind please reach out so we can get them on the calendar. At our July meeting, we had Chuck from ABR Industries and had a great presentation on coax. He offered us a discount, so we ordered better feedlines for the BuddiHEX. As the summer winds down, hopefully the cooler winds will once again come our way. We will look for some outings to do, maybe will head to the beach again for a day of radio. Maybe we will enter the club in another contest or two since a lot of members had a great time. Operating the three club stations at the EOC.

I registered W2GSB for Winter Field Day 2026 which is on January 25- 26. We had a lot of fun the past two years so let's make some more memories. Since everyone liked my chili, I will once again make it for you all to enjoy.

Our new VOIP phone system is now the HOIP phone system. For W2GSB the number is now W2GSB 102242.

Our repeater system now reaches to the west and east. Not sure which one to use click below.

<https://gsbarc.org/repeaters/>


Our RF technology team has been working in the background keeping everything up and connected. It takes a lot to keep the whole system running. Thank you all very much.

All ARES RACES AUXCOM team members, please send in a weekly Winlink check-in to stay in practice to w2hcb@winlink.org. Please send it in on Sundays.

I hope a lot of you got to work JL1GDF on Mount Fuji in Japan. Our club member Chris Kyoto went to Japan and hiked up to the summit to activate Mount Fuji. I did not get to work him I hope somebody did.

Stay active with GSBARC! Stop by the open house, come to events and please come to meetings if you can. We look forward to seeing our members take part in all we do.

Have a great September, see you soon

— John Melfi, W2HCB 

AB2ZI's YouTube Pics

The GPS 1024-Week Rollover – What It Means for Hams

A ChatGPT Summary



Many of us rely on GPS in one way or another—whether it's for logging software, APRS trackers, time synchronization, or just finding our way to the next hamfest. But buried deep inside the GPS system is a little quirk that occasionally causes big headaches: the 1024-week rollover.

What's the Rollover?

When GPS was designed back in the 1970s, the engineers gave the system a 10-bit counter to keep track of weeks. That means it can only count up to 1023 weeks (about 19.6 years). When it hits that limit, the counter resets back to zero—just like an odometer rolling over.

The first rollover happened in 1999, and most people didn't notice. The second one came around in April 2019, and this time a lot of older GPS gear got confused—thinking the date was suddenly 20 years in the past.

The next rollover is due in November 2038, but some devices already show problems depending on how their software was written.

What Happens When It Breaks?

- Devices that don't handle the rollover properly may:
- Show the wrong date (often 1999 or 2002).
- Cause logging programs or APRS to record the wrong timestamps.
- Break navigation functions in GPS receivers.
- Confuse systems that depend on precise timing (repeaters, network clocks, or digital modes).

Examples of Past Issues

During the 2019 rollover, problems popped up in unexpected places:

Some older handheld GPS units stopped showing the right date.

Certain car navigation systems (Honda, Acura, Porsche, etc.) jumped back to 2002.

The New York City wireless emergency network went down for days.

Even some drones wouldn't fly until patched.

If it can happen to million-dollar networks, it can definitely happen to a ham's shack gear.

What Should Hams Do?

Check your equipment – If you're using older GPS dongles, trackers, or time sources (especially pre-2010 gear), look up whether the manufacturer provided firmware updates.

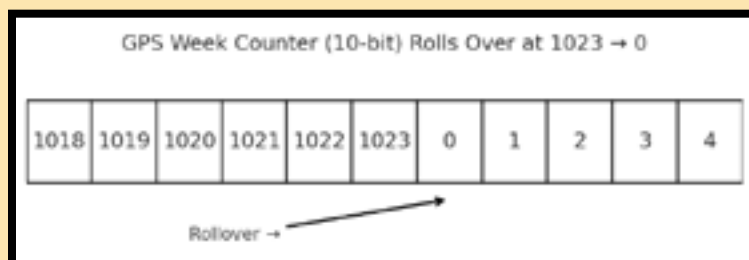
Update firmware – Many issues were fixed with patches before 2019. If you haven't updated in years, now's the time.

Have a backup plan – If your GPSDO or APRS tracker suddenly reports 1999, you'll know why! Keep alternative time and location sources handy.

Consider modern gear – Newer GPS receivers use a 13-bit counter, pushing the next rollover out to the year 2137—well beyond our lifetimes.

Bottom Line

The GPS rollover is one of those “once every couple of decades” problems, but it can sneak up on hams using older gear. A little checking now can save you a lot of head-scratching later—especially when your APRS packets claim you've been operating since the last century! 🕒



POTA Activation at Hecksher State Park, Aug. 5th, 2025





INTERNATIONAL LIGHTHOUSE & LIGHTSHIP WEEKEND AT THE FIRE ISLAND LIGHTHOUSE













The Unbalanced Load:

Satire, Ramblings and Non-Sequiturs for Your Amusement from AB2ZI and ChatGPT

SOS... Save Our SUN!!!



Solar Panels Confirmed to Be Draining Sun's Energy, Scientists Warn Humanity Running on 'Low Battery'

In a shocking development, astrophysicists at the University of Phoenix (online) announced Tuesday that solar panels, once hailed as humanity's clean energy savior, are in fact sucking the juice directly out of the sun itself.

According to lead researcher Dr. Ray Diation, every rooftop solar panel acts "like a giant cosmic straw," pulling usable watts from the star's core and leaving behind a visibly weaker sun. "We're already seeing a 12% dip in solar brightness," Diation explained while nervously wearing SPF 2 sunscreen. "At this rate, by 2050, the sun will only be the strength of a refrigerator light bulb."

A Civilization on the Brink

The revelation has triggered global panic, with scientists warning of catastrophic consequences: collapsing ecosystems, frozen crops, and widespread Vitamin D deficiencies. Experts say the early warning signs are already here. "Remember that gloomy Tuesday last week? That wasn't weather—that was solar lag," warned Diation.

Meanwhile, fossil fuel executives have expressed relief, noting that the new discovery confirms what they've been saying all along: "Sun bad. Oil good." Chevron has even launched a new marketing campaign, 'Coal: The Original Renewable Energy.'

Ham Radio Operators Rise to the Challenge

Amid the chaos, one unlikely group has stepped up to save humanity: ham radio operators.

"We knew this day would come," said John, W2HCB, Melfi, president of the **Great South Bay Amateur Radio Club**, while hunched over a gas-powered generator that roared like a Harley-Davidson in his driveway. "While the rest of the world is out there sucking the sun dry with their fancy panels, we're keeping the lights on the old-fashioned way—diesel fumes and extension cords."

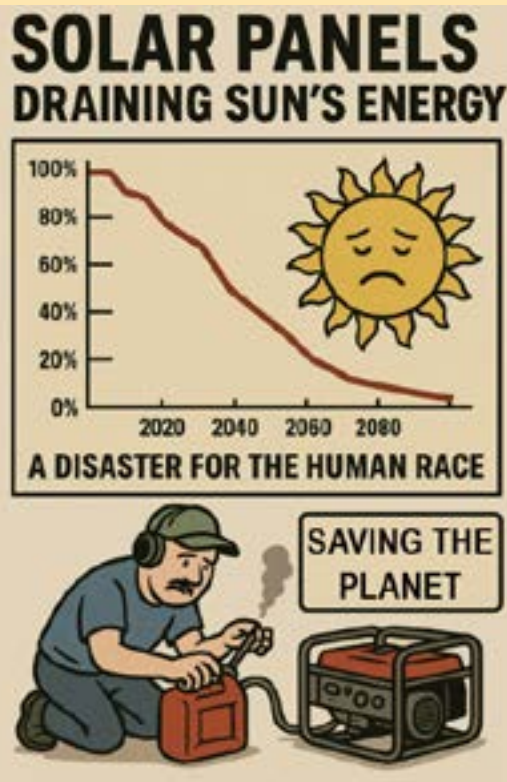
Ham operators across the country have begun deploying emergency fossil-fueled relay stations to maintain global communications as sunlight dwindles. "If the sun does go out, at least we'll still be able to complain about propagation on 80 meters," Melfi said proudly, as he refueled his Honda generator with a suspicious-looking red gas can.

A Grim Future

Scientists estimate that if solar panel use continues at its current pace, by 2080 the sun will be so drained that it will need to be "unplugged and plugged back in" just to restart. NASA has reportedly considered "jumper cables the size of Manhattan" as a last-ditch solution.

Until then, humanity faces a stark choice: abandon solar energy and return to coal-fired comfort—or continue down the path of progress and watch the sun slowly fade like a dying flashlight.

As Melfi summed it up: "When the sun finally blinks out, don't worry—we'll still be here, broadcasting CQ into the void." ☹️



POTA ACTIVATION

Where: Heckscher State Park
When: **Sat. Sept. 6th**
starting at 10:30 AM

Upon arrival at the park, use the club's simplex channel (147.535 with 110.9 pl) for talk in.

Bring your chairs to relax in.

POTA ACTIVATION

Babylon ARES/RACES Information

Div. 1: Town of Babylon ARES/
RACES

Net: 440.850/R, Sundays 8:45 AM

EC/RO: John Melfi, W2HCB,
631-669-6321

Suffolk County ARES/RACES Net:

Mon 2100 Local, 145.330/R (136.5 PL)

Alt. Frequency—146.820 (136.5 PL)

Current License Pool Expirations



Technician (Element 2)

July 1, 2022 through June 30, 2026

General (Element 3)

July 1, 2023 through June 30, 2027

Amateur Extra (Element 4)

July 1, 2024 through June 30, 2028

Great South Bay Amateur Radio Club, Inc., currently has all **Arri License Manuals** in stock and available for purchase at the discounted rate of \$30 (normally \$32.95 plus shipping).

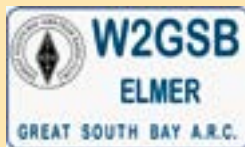
2025 VE Sessions

- ~~January 25th~~
- ~~February 22nd~~
- ~~March 29th~~
- ~~April 26th~~
- ~~May 31st~~
- ~~June 21st~~
- ~~July 26th~~
- ~~August 30th~~
- **September 27th**
- October 25th
- November 29th
- December 27th

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. Nonprogrammable calculators are allowed. The exam fee is \$15 payable by cash or a check made out to "ARRL VEC."

IMPORTANT!

If you do NOT already have an FCC FRN (Federal Registration Number) you **MUST** [Visit the FCC Universal Licensing page](#) to register for an FRN to use on the paperwork.



Club Name Badges

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

GSBARC Repeaters

LINKED REPEATERS

146.685 W2GSB -shift 110.9 Hz
Encode - 127.3 or CSQ decode

146.685 -shift 127.3 Encode/
Decode (south — receiver site
linked to 146.685)

445.725 W2TOB -shift 110.9 PL
Enc/Dec Note: No Longer DSTAR

438.475 - shift 136.5 Hz Encode/
Decode

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
Encode, 127.3 PL Decode (NEW)

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 W2TOB/C + shift DSTAR
Steerable

Echolink W2GSB-R
AllStar ACCESS NODE 465710
affiliated repeater

KB2UQK 449.23750 - SHIFT 114.8
ENCODE / DECODE

Portable Event Repeater (Trailer):
KB2UR 446.3875 - 110.9 Enc/Dec
W2GSB TRP

Club Apparel

Want a shirt, jacket, hat, sweatshirt or T-shirt with a Great South Bay club logo?

We use **VIKING** (previously Mr. Shirt) located at 80 East Montauk Hwy. in Lindenhurst. We now have a group order page.

[Click Here to Place an Order](#)

Now you can get color matched backgrounds on your logo too. Check them out...