LONG ISLAND MOBILE AMATEUR RADIO CLUB, INC.

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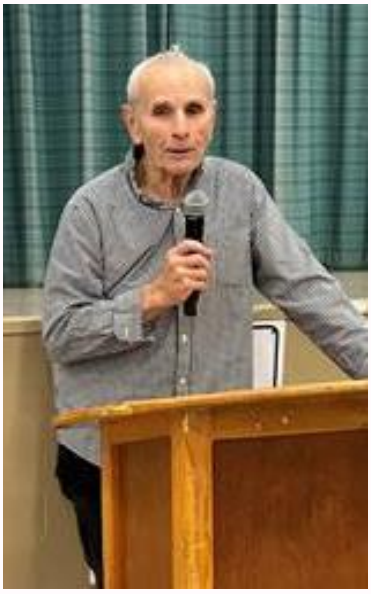
LIMARC

We Are All About Ham Radio!

LIMARC.ORG

Field Day and Antennas



Greetings!

Field Day 2025 resulted in the kind of balance for which we always strive. It was a nice social event with a respectable score. We had a good attendance and the weather was perfect. Field Day is an event to help us prepare for an emergency in which communications will play an important role. We encourage people to get on the air, exercise that voice, and correctly report the information exchange. Although not a perfect program, it does serve a purpose. Ask yourself if you could step up in an emergency and completely set up a station by yourself. There are scenarios where that might not be too far fetched.

The Field Day Committee, led by Rob, KC2ILP and Peter, KC2ZVT, spent many months preparing for the event. Thank you to all the members of the committee and to all who came down to participate. It was an enjoyable and worthwhile experience. Spending time with our members is what it is all about.

Our next large get together is the picnic on August 3rd. Another great opportunity to meet up with our members. Some of the best friendships are out there waiting for you.

73,

Richie, K2KNB

President

LIMARC Board Meeting Minutes 2025-06-11

Officers present: President - Richie K2KNB, Vice President - George WB2IKT, Secretary - Ken WB2KWC, Treasurer - Jerry WB2ZEX

Directors present: Ken KD2GXL, Martin W1EMR, Glenn WB2QDS, Al W2QZ Peter KC2ZVT

Guests present: Sig KB2HHU, Larry W2LAG, Steve WB2KDG, Wendy, Paul WS2N, Steve WB2WAK

The meeting started with the Pledge of Allegiance at 7:30 PM.

The board voted to accept the minutes of the May 25 Board of Directors Meeting; accepted unanimously.

We reviewed the dates of the next board meetings as July 2nd, August 6th, September 3, September 30th (Tuesday), November 5th and December 3rd.

Hamfest: We had excellent attendance at the Hamfest with approximately 400 attendees. Vendors and purchasers seemed pleased. Putting up the fencing is an issue, it took 2 hours.

President: Richie K2KNB said that he will send out a mailing about what we do. One of our problems is that we don't have a place of our own. We are looking for a meeting place. We are low on the priority lists for both the library and Levittown Hall. We could possibly meet at Hofstra; they currently don't have a radio club of their own.

Vice President: George WB2IKT told us that the July/August issue of the Log will have a collection of articles about antennas. The program for the September will be about Autoencoder which is part of the FreeDV HF mode. The audio quality is excellent. George is trying to get some activity at Hofstra. Andy KD2RAD and Steve KA2YHY talked about preparing a class at Hofstra.

Membership: Sig KB2HHU said that we have 329 members.

Social Media: Larry W2LAG is doing an excellent job with social media. If you are on a platform please subscribe to LIMARC. We now have 396 subscriptions on YouTube. The global edition of the Log appears 10 days after the membership edition is published. The global edition blanks out phone numbers of officers and directors as well as the financials. Larry W2LAG is making our web site and other media presences much better, Richie K2KNB thanked him for his efforts.

LIMARC Board Meeting Minutes 2025-06-11 (cont.)

ARES: Ken KD2GXL said that the next ARES meeting will be tomorrow at the Red Cross building. Because of construction the next few meetings may be combined with RACES meetings. The MS walk went very well; no incidents were reported or observed and we had good weather. We introduced ourselves to the production company running the MS Walk and they realized what an asset we were to have along the Boardwalk. Many of these events are now being run by production companies. This was a very well run event with approximately 80 riders. There were 7 incidents (flat tires, etc.) but nothing major. The next event is the Gold Coast which will be on July 13. They will be asking LIMARC for the use of our 440 repeater. The next meeting will be on July 11th.

This past weekend there was an American Red Cross exercise and they thanked us for the use of our repeaters.

Technical: Our systems are working very well. Allstar makes it very easy to reconfigure repeater linkings.

A Fusion repeater is now in Middle Island. We were offered an antenna at 94 feet. The repeater is on 440 MHz as WA2LQO, and linked to 5 other repeaters (in WIRES-X mode).

Field Day: We will be meeting Friday at 2:00 pm at Express Storage and at 7:00 am on Saturday at the Field Day site. We will be operating class 6A plus a GOTA station.

On July 20th we will be at the Cradle of Aviation Museum for the Apollo 11 anniversary.

Picnic: The LIMARC Picnic is scheduled to be on August 3.

George WB2IKT told us that we still need a crew to take down the W2DPR antenna.

The meeting adjourned at 9:20 pm.

Votes/Actions:

1 – The board voted to accept the minutes of the May 25 Board of Directors Meeting; accepted unanimously.

Respectfully submitted;
Ken Gunther WB2KWC
LIMARC Secretary

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LIMARC General Meeting Minutes 2025-06-25

The meeting started with the Pledge of Allegiance at 7:30 pm.

President: The June 8th Hamfest went very well. The vendors all had a good time. Attendees claimed 10 door prizes out of the 50 called, they were probably so involved with friends that they did not listen to the announcements; the gift certificates will be given out at meetings. The fencing at the Hamfest was a challenge; it took 2 hours to set it up. The next Hamfest will be in November. On July 20th we will have the Apollo 11 anniversary at the Cradle of Aviation museum. The morning nets are going well with 5-6 check-ins each morning. Additional nets are the 224.82 MHz net at 8:30 pm and 1.288 GHz net at 9:00 pm. Our repeaters are working well; this is good for Charlie who is taking over the tech committee. Pat WB2CMF took care of a Newsline problem.

Vice President: The summer edition of the Log is in progress. George is looking into the Radio Autoencoder by FreeDV; he feels that this will improve HF voice more than what SSB did to AM. We are trying to get college students to go to a ham radio class and establish the Hofstra Radio Club. Steve KA2YHY and Andy KD2RAD have some interested students for this opportunity.

Richie K2KNB told us that we have a lot of donated radio equipment. Make sure that your family knows how you wish your gear to be disposed of. We recently received some gear from Vin KC2RWT.

Larry W2LAG is taking care of our **social media** sites making us media savvy. Sig KB2HHU is managing membership. Glenn WB2QDS is managing many areas and Peter KC2ZVT is also doing many things. The one thing that we need is someone to help manage the Hamfests. This should be easy because we now manage them with a boilerplate approach.

Richie K2KNB said that we need to find more ways to raise money for the club. How do we make younger members realize that this is not just a job for the older members?

Larry W2LAG has **Field Day** sign-up sheets on our web site. Be sure to reserve your operating time. Last year 20m phone was vacant for 7-8 hours; let's make sure that this does not happen in 2025.

LIMARC General Meeting Minutes (cont.) 2025-06-25

Ken WB2KWC gave a presentation about N1MM+, the program that we will be using for Field Day logging this year.

Richie K2KNB reminded us to be at the site on Field Day at 7:00 am. On Friday we will be meeting at the Extra Space Storage at 2:00 pm to load the van. Richie then discussed the operations that we will be performing on Saturday morning as well as setup, safety, and takedown procedures.

We adjourned at 9:23 pm.

Respectfully submitted;

Ken Gunther WB2KWC

LIMARC Secretary

We plan to have an on-foot transmitter hunt at the LIMARC picnic. The hunt will take place around 1 or 1:30 PM. We are looking for someone to hide the transmitter, and someone to organize the participants to give basic instructions about the body fade technique, etc. Contact Larry WA2SUH at wa2suh@aol.com for details.

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LIMARC Picnic Sunday August 3rd

All LIMARC members are welcome to attend the annual picnic to be held in Bethpage State Park. There'll be plenty of food, some operating radios (possibly including a POTA activation) and a Bunny Hunt to be conducted on foot. (A brief hike through the woods). Festivities should be underway by 10AM. Check out LIMARC.org website for further information as well as the form for attendance that gives us a clue about how much food will be required.

If the weather is uncooperative, the picnic will be cancelled. Stay tuned to the LIMARC.org web site for that info. In order to ensure we have enough food, and all the stuff that a picnic requires, please fill out this brief form so we get a good idea of how many people are coming. Please click the link below. Thanks!

https://forms.gle/dxo65tWNUEfnvmDUA

Bethpage State Park – Picnic Area
Sunday, August 3, 2025
10:00 AM until the last bit of food disappears!

Current Happenings in Nassau County ARES

Nassau County A.R.E.S. normally meets on the second and fourth Thursdays of the month. All are welcome to attend!

As we turn the calendar to July/August we are well into our season of Public Service Events.

The American Diabetes Association's Ride for the Cure Bike Ride on Saturday May 31st, was a new one for us. There were 3 routes of differing degrees of difficulty, 14 miles, 32 miles and 64 miles. There were approximately 80 Riders for the event, ARES provided radio support using several local repeaters and use of APRS tracking. By utilizing APRS, we were able to track the Support and Gear (SAG) Vehicles to dispatch the nearest available to riders calling in for assistance. ARES Net Control operators monitored ten such calls, all to successful completion. We provided operators at 5 Rest Stops, as well as Several Net Control operators, and two SAG vehicles.

Nassau ARES participated in LIMARC's Field Day, bringing the Emcomm Trailer to house the 2 digital stations and a packet/winlink station

Our Next Meeting will be Thursday, September 11th, 7:30pm. Location to be determined at time of printing. If you would like to join us or help with the events, please contact Ken at kd2gxl@ncaresmail.net

To join us requires very little, an FCC license, a radio and a desire to help and learn. Part of being a licensed radio operator is for public service. Every time we support one of these events, we practice our radio skills so we are prepared when an emergency does arrive (i.e. when traditional methods of communication are inoperable, such as weather-related storms, or other disasters). For further information, use the email above or go to our webpage: www.nassaucountyares.org

Ken Kobetitsch, KD2GXL
District Emergency Coordinator
Nassau County, NY

Behind the Scenes Look at the Covers of The LIMARC Log

We began using ChatGPT to draw the images for the cover of the LIMARC Log starting with the February 2025 issue. We usually don't get it correct on the 1st iteration. The drawing function often produces very odd results. Look at these **rejected** covers for this issue:

This is the 1st iteration of this month's cover. Notice the hand coming out of the ground holding a "PIELD SHEHGH" meter. Above that is a "FELD SWOXW6YH" meter. Obviously correct spelling is not CHATGPT's strong point.

Also notice that the antenna field strongly resembles a cemetery; that is NOT the message that we want to convey to our readers.

So we pointed out these faults in a new prompt to CHATGPT. And it spent a few minutes processing the requested changes. And it came up with (next picture):

The next iteration of the cover begat the above image. CHATGPT removed much of the color from the 1st image when it removed the underground hand. The "antenna grave markers" changed to cones (reminiscent of AEA VHF antennas from years ago). It correctly spelled the upper field strength meter, but failed to do so on the lower one.

Back to the prompt. Spell and return color.

The last image finally was adequate for the LIMARC Log, but the editor had to manually insert the screen shots on the VNA and the spectrum analyzer as well as identify what the field strength meter actually measured.

An Overview of Antenna Test Equipment

Essential Tools for Precision and Safety

Antenna test equipment is among the most highly specialized gear used by ham operators. While transceivers, amplifiers, and tuners often capture the spotlight, it is the performance of the antenna system that ultimately determines just exactly how well a signal is transmitted and received. Testing antennas is not only about maximizing signal strength — it involves mechanical, electrical, and environmental assessments that ensure safety, compliance, and reliability. Understanding the categories of antenna testing and the equipment used in each is fundamental to successful amateur radio operation.

Mechanical Testing

The first line of testing any antenna system begins with mechanical integrity. Even the best-designed antenna will fail if it cannot withstand environmental stress. Hams must evaluate whether the structure is strong enough to endure wind, rain, and ice loads over time. This includes assessing the mast, guy wires, and support structures.

Common tools used include:

Measuring tapes and laser distance meters to verify that antenna element lengths match design specifications. Incorrect dimensions can detune the antenna, reducing efficiency.

Torque wrenches and tension gauges are used to secure and measure the load on guy wires. Anchoring systems must be tested for secure placement and strength, often using pull-testing devices or manual inspection methods to ensure long-term durability.

Electrical and Continuity Testing

Once mechanically sound, check the antenna system for electrical integrity. Cables, coils, traps, connectors, and baluns must be free of shorts, opens, and improper connections.

The equipment includes:

Multimeters for basic continuity checks and resistance measurements.

Time Domain Reflectometers (TDRs), that send pulses down a transmission line and measure the reflections to detect discontinuities, and the distance to cable faults.

Clamp-on RF current probes measure RF that incidentally may couple into auxiliary circuits (such as rotor control lines or audio feeds).

Reception Tests

For receiving, sensitivity and signal clarity are paramount. Testing antennas for receive capability involves measuring both signal strength and background noise.

Key tools include:

Spectrum analyzers to display the strength and quality of incoming signals across frequency bands. They also measure the noise level in the environment and help determine if the antenna is susceptible to picking up unwanted RF noise.

Transmission Tests

Transmitter-side testing ensures that the antenna effectively radiates the intended power without excessive losses or signal distortion.

Vital tools include:

Vector Network Analyzers (VNAs) to measure impedance, VSWR (Voltage Standing Wave Ratio), and bandwidth across a range of frequencies. These tests reveal whether the antenna is resonant at the desired frequency and how well it matches the transmission line.

Directional wattmeters measure VSWR and verify transmitter output power.

Field strength meters verify actual RF radiation levels and are used to measure antenna far field radiation patterns.

Dummy loads are used to test power output safely before connecting to an antenna.

Testing for power handling capability is essential, especially for high-power transmitters, to ensure that connectors and feedlines can withstand operational loads without overheating or arcing.

Environmental and Regulatory Testing

Antenna systems must also meet regulatory and environmental safety standards. Failure to do so can lead to interference with other systems or pose safety risks.

Test considerations include:

RFI (Radio Frequency Interference) suppression tools like ferrite beads and filters are tested using RF sniffers and EMI receivers.

Power line interference analysis often requires portable spectrum analyzers and small directional antennas to locate and characterize noise sources.

Visual inspections verify that live antenna elements are placed where they cannot be inadvertently contacted by people or animals—especially important for high-power systems.

Compliance with FCC radiation exposure rules is facilitated by using RF exposure calculators, isotropic field probes, and ensuring appropriate distance from living spaces and neighboring properties.

47 CFR § FCC 97.13(c) – Environmental evaluation requirements.

These rules mandate that amateur radio stations must evaluate RF exposure to ensure they do not exceed the Maximum Permissible Exposure (MPE) limits set by the FCC. It references broader RF exposure limits found in: FCC OET Bulletin 65

Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields. Issued by: FCC Office of Engineering and Technology (OET)

Link: https://www.fcc.gov/oet/rfsafety

This bulletin includes:

MPE limits for controlled (occupational) and uncontrolled (general public) environments.

Frequency-dependent exposure limits in milliwatts per square centimeter (mW/cm²).

Required separation distances for common power levels and antennas.

Key Specifications from FCC OET Bulletin 65

MPE limits vary by frequency and environment. Here are simplified examples:

Frequency (MHz)	Uncontrolled MPE Limit (mW/cm²)	Controlled MPE Limit (mW/cm²)
• 30–300	0.2	1.0
• 300–1500	*f* / 1500	*f* / 300
• 1500–100,000	1.0	5.0

(where f = frequency in MHz)

Example:
At 150 MHz (VHF):

- Uncontrolled limit = 150 / 1500 = 0.1 mW/cm²
- Controlled limit = 150 / 300 = 0.5 mW/cm²

Amateur Radio Station Requirements

As of the FCC rule update in May 2021, all amateur radio operators must:

- Evaluate their station if output exceeds certain power thresholds (e.g., 50W PEP at the antenna feedline).
- Maintain documentation of the evaluation.
- Reassess if they change antenna, power level, or station configuration.

Operators may use:

- FCC RF exposure calculator
- ARRL worksheets and online tools
- Modeling software like EZNEC for more complex antenna systems

Conclusion

Ham radio antenna test equipment is more than a convenience—it's a necessity for ensuring safe, effective, and regulation-compliant operations. From mechanical stress testing to precise RF measurements, each category of testing plays a role in the overall health of an amateur station. By using a combination of traditional tools and advanced diagnostic instruments, ham radio operators can achieve optimal performance while safeguarding both their equipment and community as well as satisfying FCC requirements.

Note: This article was generated by ChatGPT with a significant amount of human editing

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LIMARC 2025 Field Day Report Submission

First, a review of LIMARC's 2024 score submission to the ARRL:

1	Call	GOTA CALL	FINAL SCORE	Category	Section	Power Multiplier	CLUB NAME
3169	W2VL (+WV2LI)	WV2LI	5656	6A	NLI	2	Long Island Mobile ARC

Participants	Transmitters	Power Source	TOTAL CW QSOs	TOTAL DIGITAL QSOs	TOTAL PHONE QSOs	TOTAL QSOs	BONUS POINTS
60	6	G	356	539	333	1228	1410

Our 2025 LIMARC submittal looks like this: (*Submitted by Ken WB2KWC*)

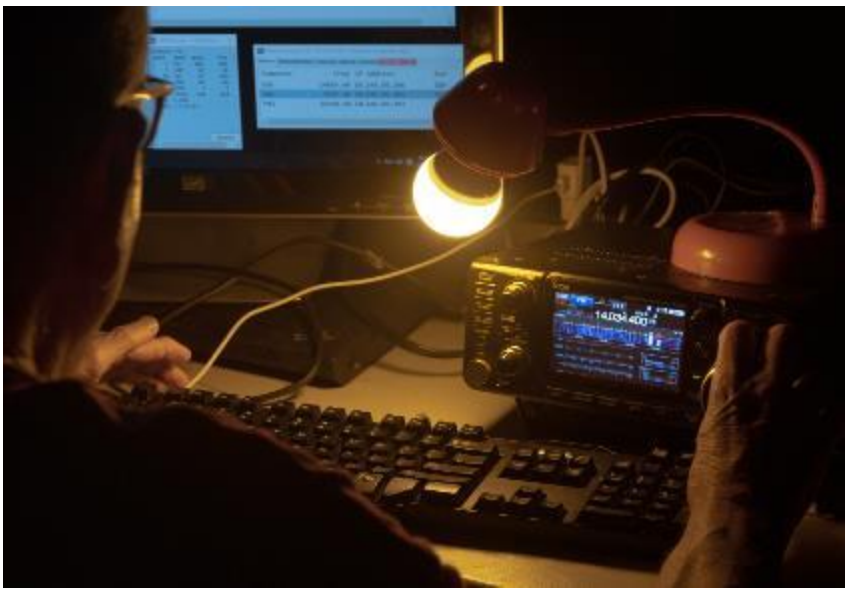
Here is my calculation of our Field Day score. The numbers beginning with 7 are the section of the score that each is for.

7.1 QSOs
CW=483
Ph=181
Dig=430
Total=1094
Points=2007
7.2 Power mult
Power mult-2
Points=2007 x 2=**4014**

7.3.1 100% emergency power 100 x 6 = 600
7.3.3 Public location = 100
7.3.4 Public info table 100
7.3.5 Message to SM 100
7.3.6 Message Handling 100
7.3.9 W1AW Bulletin = 100
7.3.11 Visitation by elected official = 100
7.3.13.1 – GOTA QSOs 18 x 5 = 90
7.3.13.2 – GOTA Coach = 100
7.3.14 – Web submission = 50
7.3.15 – Youth participation = 100
KE2BXH – 53 QSOs
7.3.16 – Social media = 100
7.3.17 – Safety officer = 100
7.3.18 – Responsible bonus – 50

LIMARC Field Day 2025 Photo Review


DIGITAL



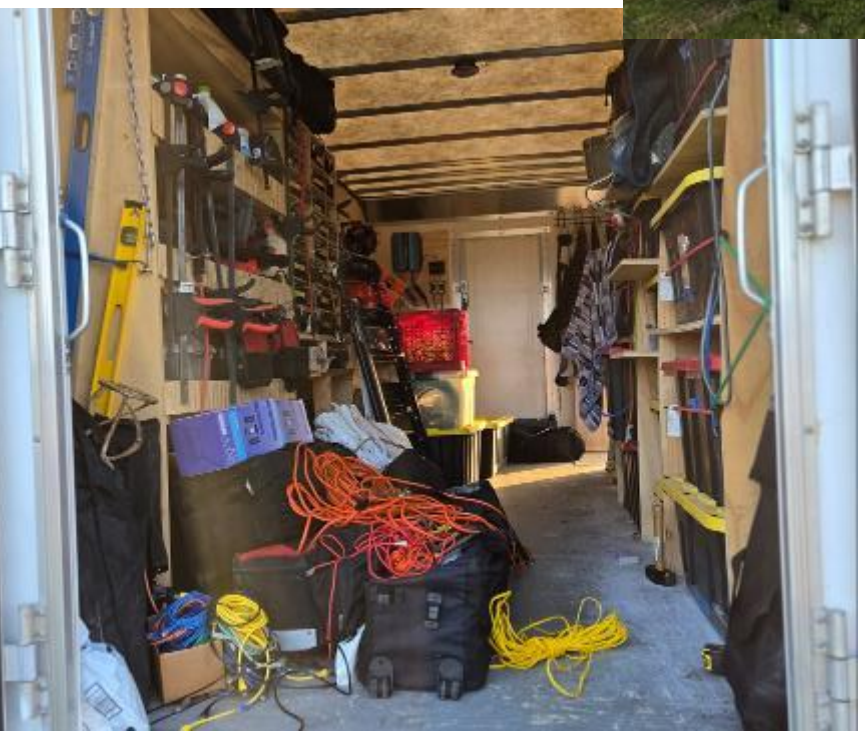

FIELD
#6


NASSAU COUNTY ARES
EMCOMM POST


NASSAU COUNTY ARES
EMCOMM POST
DIGITAL
www.NassauCountyARES.org
Disaster & Public Service Radio Communications


Service


LIMARC FIELD DAY INFORMATION & REGISTRATION
LIMARC FIELD DAY SITE PLEASE SIGN IN FIRST

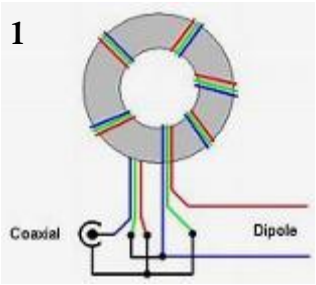


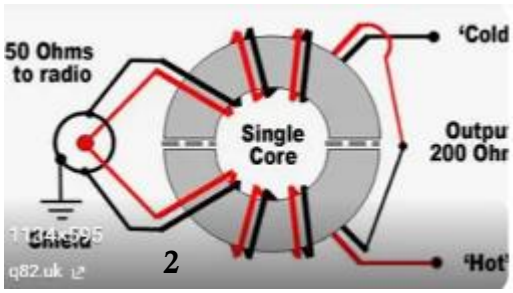
Introduction to Baluns for Ham Radio Applications

In amateur radio (ham radio) systems, efficient transmission and reception of RF signals depend on well-matched and balanced antenna systems. One critical component often used to achieve this is the balun-a device that converts between balanced and unbalanced signal configurations. The term 'balun' itself is derived from 'balanced to unbalanced.' Baluns are most commonly used in antenna systems, particularly when connecting a balanced antenna, such as a dipole, to an unbalanced feedline like coaxial cable. Without a balun, this mismatch can lead to undesirable effects such as common-mode currents on the feedline, RF interference in the shack, radiation pattern distortion, and reduced efficiency. Common balun types include Voltage Baluns, Current Baluns, and Choke Baluns. A 1:1 current balun is typical for center-fed dipoles with coax, while 4:1 baluns are often used for off-center-fed dipoles or loop antennas.

Typical Balun Configurations

Below are simple diagrams showing common balun types: [**1**] 1:1 Current Balun for dipoles [**2**] 4:1 Voltage Balun for loop or OCF antennas [**3**] Choke Balun to suppress RF on feedlines





Build or Buy:

Choosing the Right Balun: When deciding whether to build or buy a balun, consider the following: - **BUILD**: If you have basic RF construction skills, you can wind your own balun using ferrite toroids, enameled wire, and a weatherproof enclosure. This is cost-effective allowing customization. - **BUY**: Commercial baluns from reputable brands (e.g., Balun Designs, DX Engineering) are pre-tested, optimized for specific frequency ranges, and typically more durable for outdoor use. For most new operators, buying a commercially-made balun is a safe and reliable option. Builders may prefer DIY for experimentation and cost savings.

References 1. ARRL Handbook for Radio Communications, Latest Edition, ARRL. 2. Lewallen, Roy. 'Baluns: What They Do and How They Do It', EZNEC. 3. Pozar, D. M. Microwave Engineering (4th ed.), Wiley

by ChatGPT v1.1.0

Removing a 47 Year-old Triband Beam Antenna

Chet W2DPR became a silent key in 2024. He left behind his amateur station with a Moseley TA-33JR antenna that he had wanted to donate to LIMARC. George WB2IKT accepted the donation for LIMARC and promised to remove the antenna. Here we show some photos of Sig KB2HHU removing and disassembling Chet's antenna system.

LIMARC's YouTube channel is a great resource for in-depth information on various topics. Our speaker videos, and others, are available for you to view on demand, 24 hours a day, 7 days a week! Point your smartphone camera at the QR code to take you directly there. Please ***SUBSCRIBE*** to get notified of new videos as we post them.

Also, visit the rest of our social media channels. If you are on these platforms, please **subscribe, like and follow** us. You can click on the links below or go to the bottom of ANY page on LIMARC.org to find all of our social media outlets. COME JOIN US!

- Facebook: https://www.facebook.com/groups/longislandmobilearc
- Instagram: https://instagram.com/longislandmobilearc
- LinkedIn: https://linkedin.com/company/longislandmobilearc
- YouTube: https://www.youtube.com/@longislandmobilearc?sub_confirmation=1
- X (Twitter): https://x.com/LIMobileARC

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Join LIMARC Groups.io

This Groups.io Group, known as the "**LIMARC Reflector**" is open to LIMARC members in good standing. The LIMARC Reflector is used to post club notices, activities, and allow LIMARC members to share articles or postings, and their ideas about amateur radio and club-related materials amongst each other.

Go to https://groups.io/register Complete the Email address and Password fields, then click or tap the *Create An Account* button. Search for LIMARC and join. The moderator will notify you within 48 hours about your acceptance to the group.

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Reminder: LIMARC is a 501(c)(3) non-profit corporation. As such, all monetary donations are tax deductible, and equipment donations are deductible either to the amount that the club might sell the item for, or the fair market value. As we try to provide assistance to schools wishing to set up amateur radio programs, please consider us for your donations.

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If You Hear Something, Tell Someone

Those of you who use the repeaters on a regular basis are all too aware of the fact that there are certain individuals who have nothing better to do with their time than to interfere with people on the repeater. An organized effort is ongoing to locate and identify these individuals.

YOU CAN HELP: If you hear malicious interference on any of the LIMARC repeaters, please hit the reverse (HM/RV) button on your radio and see if you are able to hear them on the input. Do not acknowledge the interference on the air. Please email your findings to RFI@limarc.org. Indicate if you heard them on the input. Include date, time, the repeater, your location and type of antenna; include the heading if you have a directional antenna.

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Link to the ARRL NYC/LI Section Website

One can find recent happenings at the ARRL's NYC/LI section website: http://nli.arrl.org/

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ARRLVEC volunteer examiner coordinator®

ARRL VEC, 225 Main Street, Newington, CT 06111
Phone: 1-860-594-0300 web: arrl.org/volunteer-examiners

Follow these three steps to become an ARRL Volunteer Examiner:

1. Review the Volunteer Examiner Manual paying special attention to Chapter 2: Becoming a Volunteer Examiner. Read the information that extends and supports the published manual. http://www.arrl.org/files/file/VEs/VE%20Manual%20Web%20Final%202022.pdf

2. Complete and sign the Volunteer Application form and the open book review. (40 question review). http://www.arrl.org/files/file/VEs/ARRL%20VEC%20VE%20pkg%202022%20interactive.pdf

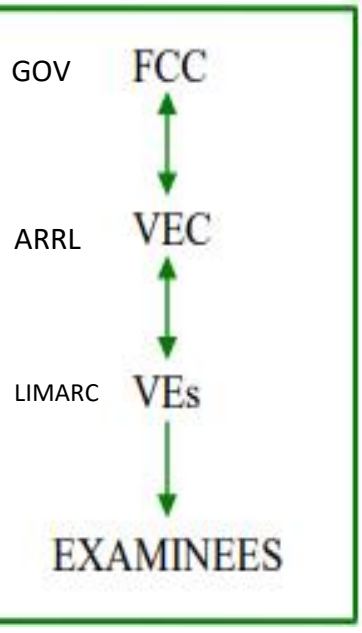
3. Please fax, mail or email forms (Adobe PDF file or scanned JPEG image showing your real signature) to this address:

   ARRL VEC , 225 Main Street, Newington Ct. 06111

   Email: vec@arrl.org

AMATEUR RADIO ARRL VEC VOLUNTEER EXAMINER

The VEC serves as the interface between the FCC and the VEs, who administer the exams to the candidates. VEs serve under the umbrella of the VEC, while the VEC supports the VEs and provides data to the FCC for issuance of licenses and resolution of regulatory issues.



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LIMARC History

-- compiled by George Sullivan, WB2IKT

50 Years Ago—From the July 1975 Log

Repeater linking was just approved for amateur radio by FCC. The technical committee started investigating PL and narrowbanding to minimize interference. Ed W2KPQ formed a LIMARC wideband ATV group to establish standards and fabricate equipment and a repeater.

40 Years Ago—From the July 1985 Log

LIMARC did not publish a summer (July/August) Log in 1985.

30 Years Ago—From the July 1995 Log

LIMARC did not publish a summer (July/August) Log in 1995.

20 Years Ago—From the July 2005 Log

LIMARC did not publish a summer (July/August) Log in 2005.

10 Years Ago—From the July 2015 Log

LIMARC celebrated the launch of its new DMR repeater. Discussions centered on proper operation and opening it to all talk groups. Preparations started for a permanent antenna and station at the Cradle of Aviation museum. ARISS approved LIMARC to participate in an ISS contact at the Cradle of Aviation. LIMARC had 379 paid members. Special Event operation planned to be at the Cradle of Aviation for the 46th anniversary of the 1st manned lunar landing.

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Heard on a LIMARC Net

The LIMARC Tech Net

Meets every Sunday at 8PM on the 146.85 repeater. AC2GS is net control.

All technology may be covered in discussions on this amazing net.

Space Net

Meets every Sunday immediately following the Tech Net. WS2N is net control

LIMARC Infonet

Meets every Monday evening at 8:30PM on 146.85 MHz. Rotating net control assignments

06-23-2025 KC2FYJ Net Control, 31 check-ins **k2knb** - reminder - be really careful outside due to the weather - hydrate and be really careful. be careful regarding plastic ingestion - this Wed will be the **June meeting at Levittown hall** - it will be about field day which will being Saturday at 2 PM - we will need help in loading the truck on Friday afternoon at 'extra space storage' on Sunnyside Blvd. in Plainview - email k2knb@limarc.org or fieldday@ or kc2zvt@ to let us know if you will be there - we need the help - setup for field day begins at 7 AM on Saturday - no towers or beams - breakfast of bagels, etc, also lunch - we want to be finished setting up before 2PM when the event starts - a signup sheet is on the website - 24 hour operation - reminder **Friday night nets 8:30 for 220 and 9:00 for 1.2gig net** - please join them if you have the equipment - **morning net** has been running nicely - please join from 7:45 to about 9:00 AM - interesting conversations have been held - on 146.850

wb2kwc - this wed is 4th wed of the month, but due to the general meeting, there will be no computer net - next one will be on July 16th

w2lag - adding about field day - if you know a particular time slot or slots you would like to operate, please be sure to go to limarc.org, click on 'field day 2025' and follow the instructions to reserve your time slot and station - this helps us ensure everyone gets to operate, and we run 24 hrs. please email w2lag@limarc.org

n2rq - reminder about the GOTA station for anyone who hasn't operated in the past year or more

Swap & Shop Net

Meets every Monday immediately following the Infonet. KD2FIU is net control

Heard on a LIMARC Net (cont.)

Daily Morning Drive Time Net

Begins at 7:45 AM K2KNB is net control The participants discuss traffic, weather, and topical issues during their commutes as well as those who want to chime in with something to say.

Computer Net

Meets monthly on the 3rd and 4th Wednesdays at 8:30 PM. WB2KWC is net control.

Trivia Net

Meets on the 5th Wednesday at 8:30 PM K2KNB is net control

A fun net with memories, ham radio nostalgia, stories & reminders of the "good old days".

220 and 1.2 GHz Friday Night Nets

Join us in checking out your 220 and 1.2 GHz equipment along with ad-hoc discussions.

8:30PM 224.82 MHz Pl. 136.5—Glen Oaks Input is 223.22 MHz

6/13/25 Wi2M net control 8 check-ins Topic: How do you listen to VHF/UHF? Scan the band? Or monitor a particular Repeater or Simplex Frequency?

9:00 PM 1.2880 GHz Pl. 136.5—Glen Oaks Input is 1.276 GHz Wi2M is net control

****

Your article could have been published in the Log, but you need to submit it. Original articles about most anything related to ham radio are welcomed.

Contact George WB2IKT (WB2IKT@limarc.org) about your submission.

Join us for the second annual 2025 **IEEE World Forum on Public Safety Technology (WF-PST),** a ground-breaking event dedicated to addressing current and future needs in public safety technology. Explore advancements in existing and emerging technologies, discover new research, and gain insights into breakthroughs shaping the future of public safety applications.

https://engage.ieee.org/IEEE-WF-PST-Sign-Up.html

The 2 1/2 day in-person program, filled with thought-provoking keynotes, critical-thinking panel discussions, and cutting-edge technical paper presentations, will deliver high-quality original research, unique innovations, and compelling insights into the future of public safety technologies.

- AI/ML, Smart Algorithms, Digital Twins, and Intelligent Systems
- Communication and Networking
- Transportation Technologies for Public Safety
- Edge Computing, Cloud Computing, and IoT
- Blockchain and Forensics
- Security, Privacy, and Trust
- Health and Wellness of Public Safety Personnel
- Public Safety Technologies supporting Eldery and People with Disabilities
- Environmental Impacts with Public Safety Technologies

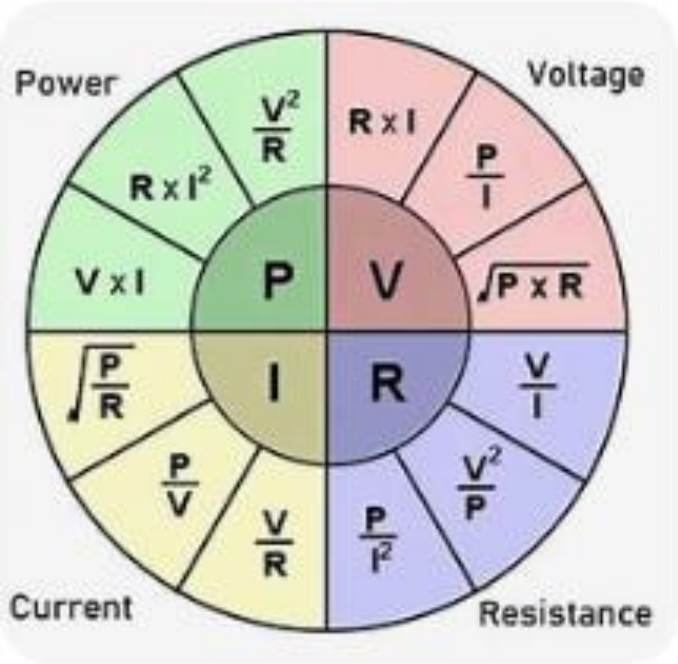
IEEE Public Safety Technology™

IEEE Future NETWORKS™

- Investigate, identify, and prioritize opportunities for existing relevant technologies for solving real-world challenges that public safety agencies are/will be facing
- Research new technologies for filling the gaps in public safety applications
- Launch and lead sustainable activities, products, and services to establish the use of technologies by public safety entities, and generate new revenue streams
- Engage, interact, and collaborate, where appropriate, with public safety associations, industry consortia, academic and government entities

DOOR PRIZE DONATORS

These individuals, organizations, and companies contributed to our events. Please consider making future purchases from them as a thank you for their generosity and loyalty to LIMARC. Be sure to let them know that you saw their ad in the LIMARC LOG.



Ohm's law defines the relationship between Voltage, Current and Resistance: **V = I x R**

Where:

V is the electrical potential (voltage), measured in volts (V),

I is the current, measured in Amperes (Amps/A), and

R is the resistance, measured in Ohms (Ω).

Joule's law states that: **P = V x I**

where: **P** is Power, measured in Watts.

The combination of Ohm's law and Joule's law states 12 formulas where 2 of the 4 variables are known. To use the circle, choose the quadrant corresponding to the variable to calculate, then select the segment corresponding to the known variables' values.

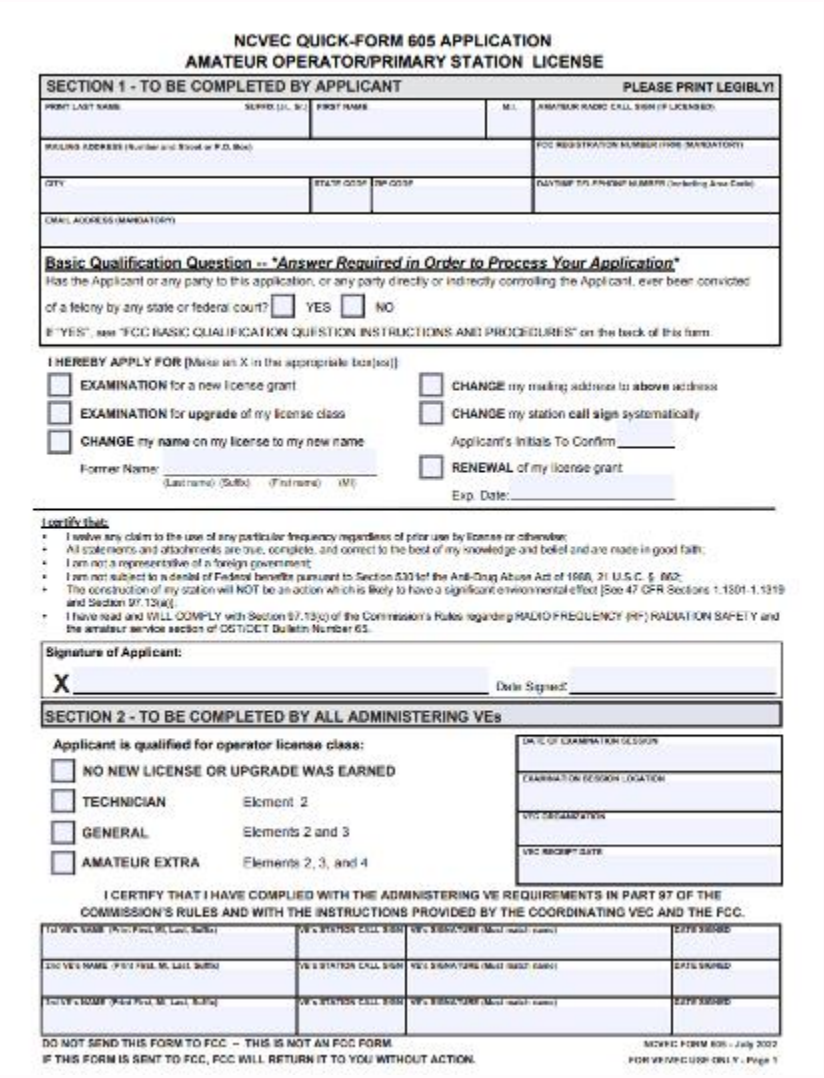
Testing Schedule for 2025

LIMARC VE Test Sessions are held on the second Saturday of every odd numbered month at Levittown Hall, 201 Levittown Parkway, Hicksville, NY. Please remember to bring **two** pieces of identification (one with a photo), your ***original*** ham license ***and*** a copy of it, any ***original*** **Certificates of Successful Completion of Examination (CSCE's)** *and* copies of them.

Also remember to bring the proper fee in check made out to ARRL VEC or exact change (NOTE: the 2025 ***exam fee*** *remains at* ***$15.00)****.* The LIMARC VE Team will supply the FCC Form 605. The FCC **$35 license fee** applies to all renewals, new applications, and vanity callsign requests, but not license upgrades.

Contact Al W2QZ at (516) 623-6449, or Jim W2KFV at (516) 315-8608 for information.

VE Sessions will be held at Levittown Hall. All Saturday VE Sessions start at 8 AM



NCVEC QUICK-FORM 605 APPLICATION
AMATEUR OPERATOR/PRIMARY STATION LICENSE

SECTION 1 - TO BE COMPLETED BY APPLICANT PLEASE PRINT LEGIBLY!

PRINT LAST NAME | SUFFIX (Jr., Sr.) | FIRST NAME | M.I. | AMATEUR RADIO CALL SIGN (IF LICENSED)

MAILING ADDRESS (Number and Street or P.O. Box) | FCC REGISTRATION NUMBER (FRN) (MANDATORY)

CITY | STATE CODE | ZIP CODE | DAYTIME TELEPHONE NUMBER (Including Area Code)

EMAIL ADDRESS (MANDATORY)

Basic Qualification Question -- *"Answer Required in Order to Process Your Application"*
Has the Applicant or any party to this application, or any party directly or indirectly controlling the Applicant, ever been convicted of a felony by any state or federal court? ☐ YES ☐ NO
If "YES", see "FCC BASIC QUALIFICATION QUESTION INSTRUCTIONS AND PROCEDURES" on the back of this form.

I HEREBY APPLY FOR [Make an X in the appropriate box(es)]

☐ **EXAMINATION** for a new license grant
☐ **EXAMINATION** for **upgrade** of my license class
☐ **CHANGE** my **name** on my license to my new name
Former Name: _____ (Last name) (Suffix) (First name) (MI)
☐ **CHANGE** my mailing address to **above** address
☐ **CHANGE** my station **call sign** systematically
Applicant's Initials To Confirm _____
☐ **RENEWAL** of my license grant
Exp. Date: _____

I certify that:
- I waive any claim to the use of any particular frequency regardless of prior use by license or otherwise;
- All statements and attachments are true, complete, and correct to the best of my knowledge and belief and are made in good faith;
- I am not a representative of a foreign government;
- I am not subject to a denial of Federal benefits pursuant to Section 5301of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862;
- The construction of my station will NOT be an action which is likely to have a significant environmental effect [See 47 CFR Sections 1.1301-1.1319 and Section 97.13(a)];
- I have read and WILL COMPLY with Section 97.13(c) of the Commission's Rules regarding RADIO FREQUENCY (RF) RADIATION SAFETY and the amateur service section of OET/CIET Bulletin Number 65.

Signature of Applicant:
X _____ Date Signed: _____

SECTION 2 - TO BE COMPLETED BY ALL ADMINISTERING VEs

Applicant is qualified for operator license class:

☐ NO NEW LICENSE OR UPGRADE WAS EARNED
☐ TECHNICIAN — Element 2
☐ GENERAL — Elements 2 and 3
☐ AMATEUR EXTRA — Elements 2, 3, and 4

DATE OF EXAMINATION SESSION | EXAMINATION SESSION LOCATION | VEC ORGANIZATION | VEC RECEIPT DATE

I CERTIFY THAT I HAVE COMPLIED WITH THE ADMINISTERING VE REQUIREMENTS IN PART 97 OF THE COMMISSION'S RULES AND WITH THE INSTRUCTIONS PROVIDED BY THE COORDINATING VEC AND THE FCC.

1st VE's NAME (Print First, MI, Last, Suffix) | VE's STATION CALL SIGN | VE's SIGNATURE (Must match name) | DATE SIGNED
2nd VE's NAME (Print First, MI, Last, Suffix) | VE's STATION CALL SIGN | VE's SIGNATURE (Must match name) | DATE SIGNED
3rd VE's NAME (Print First, MI, Last, Suffix) | VE's STATION CALL SIGN | VE's SIGNATURE (Must match name) | DATE SIGNED

DO NOT SEND THIS FORM TO FCC – THIS IS NOT AN FCC FORM
IF THIS FORM IS SENT TO FCC, FCC WILL RETURN IT TO YOU WITHOUT ACTION.

NCVEC FORM 605 – July 2022
FOR VEC USE ONLY – Page 1

LIMARC 2025 Schedule of Events

Month	Bd.Mtg	Gen.Mtg	VE Exam	Hamfest	Other Events
Jan.					
Feb.					
March					
April					
May					
June					
July	2		12		~~Moon Ldg. 20~~
Aug.	6				**Picnic 3**
Sept.	3	10	13		
Oct.	1	8			VanMtrPky 10
					JOTA 18-19
Nov.	5	12	8	9	
Dec.	3	10			GARC anv 21

HRU—Ham Radio University

SCR—School Club Roundup

Lindbergh—Anniversary of 1st non-stop transatlantic flight

Moon Ldg—Anniversary of Apollo 11 1st Lunar Landing

VanMtrPky—Anniversary of Opening of Vanderbilt Motor Parkway

JOTA—Jamboree on the Air for Scouting America

GARC— Grumman Amateur Radio Club (callsign: WA2LQO)

Dates subject to change without notice. LIMARC may revise them as required.

July 20 Lunar Landing event cancelled

LIMARC Repeaters

*Analog **PL** tone is **136.5***

Location	Output Frequency	Shift	Callsign	Mode	Echo Link	IRLP	AllStar	System Fusion
Glen Oaks	146.85	- 600kHz	W2VL	Analog	W2VL-R, Node 487981		Node 576290	
Glen Oaks	224.82	-1.6MHz	W2KPQ	Analog				
Glen Oaks	1288	-12MHz	W2VL	Analog				
Hempstead Hofstra U. GARC	146.745	-600kHz	WA2LQO	Analog /Digital				WIRES-X Node:98304 Room:08304
Plainview	449.125	-5MHz	W2KPQ		W2KPQ-L Node 500940	Node 4969	Node 576291	
Plainview	449.375	-5MHz	W2KPQ	DMR CC1				
Selden	147.375	+600kHz	W2KPQ	Analog	W2KPQ-R Node 503075	Reflector Node 9126		
Selden	449.3625	-5MHz	W2KPQ	DMR CC1				
Middle Island	449.075	-5MHz	NY2H	Analog				
East Meadow	145.070		W2KPQ	Packet Digipeater				

LIMARC Nets

Net	Day	Time	Frequency	Net Control
TechNet	Sunday	8PM	146.85	AC2GS
SpaceNet	Sunday	Follows TechNet	146.85	WS2N
Infonet	Monday	8:30PM	146.85	Rotating Schedule
Swap&Shop	Monday	Follows Infonet	146.85	KD2FIU
ARRL NewsLine	Monday	Follows Swap&Shop	146.85	(audio feed)
Computer Net	3rd & 4th Wednesday	8:30PM	146.85	WB2KWC
Nostalgia Net	5th Wednesday	8:30PM	146.85	K2KNB
220 Net	Fridays	8:30 PM	224.82	K2TGW
1288 Net	Fridays	9:00 PM	1288	Wi2M
AM Drive Time	Daily	7:45 AM	146.85	K2KNB

Week Rotation	Net Control
1	N2RQ
2	K2KNB
3	K2KNB
4	KC2FYJ
5	KC2ZVT

GARC Repeater

145.33 WA2LQO

136.5 PL FM Analog

Hauppauge

LIMARC Officers 2025			
President	**Richie Cetron**	**K2KNB**	**(516) 694-4937**
Vice-President	**George Sullivan**	**WB2IKT**	**(516) 749-8493**
Secretary	**Ken Gunther**	**WB2KWC**	**(516) 541-1332**
Treasurer	**Jerry Abrams**	**WB2ZEX**	**(718) 531-7795**

Directors 2025		
Al Bender	**W2QZ**	
Peter Genova	**KC2ZVT**	
Martin Grillo	**W1EMR**	
Harry Gross	**KC2FYJ**	
Glenn Kearney	**WB2QDS**	
Ken Kobetitsch	**KD2GXL**	

Email for officers and Board members can be addressed to their: call sign@LIMARC.org.

In addition, all can be reached at LIMARC@LIMARC.org

George Sullivan, Editor of The LOG, WB2IKT@LIMARC.org

LIMARC PO Box 392 Levittown, New York 11756-0392 Published Monthly

From The Editor

As usual, please send items for entry into the LOG to WB2IKT@LIMARC.org. I will be glad to accommodate appropriate requests. If you miss a deadline (the deadline is the 15th of the month) I would be glad to place your item in the LOG next month, space permitting. Thanks, and 73, George WB2IKT - Editor, The LOG