The Compass!

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

June 2026 | Volume 54 | #6

Inside this edition:

Long Island's Friendliest Amateur Radio Club!

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

2026

- June 3rd: Wednesday Night Open House
- June 11th: Board Meeting
- June 25th: General Membership Meeting
- July 1st: Wednesday Night Open House
- July 9th: Board Meeting
- July 30th: General Membership Meeting
- August 5th: Wednesday Night Open House
- August 13th: Board Meeting
- August 27th: General Membership Meeting
- September 2nd: Wednesday Night Open House
- September 10th: Board Meeting
- September 24th: General Membership Meeting
- October 7th: Wednesday Night Open House
- October 8th: Board Meeting
- October 29th: General Membership Meeting
- November 4th: Wednesday Night Open House
- November 12th: Board Meeting
- November 19th*: General Membership Meeting
- December 2nd: Wednesday Night Open House
- December 10th: Board Meeting
- December 17th*: General Membership Meeting

Note: November and December General Meetings 1 week earlier due to Thanksgiving and Christmas holidays.

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

NEW GSBARC OPEN HOUSE!

Starting Wednesday night, June 3rd at 7 p.m.
Open House with Projects and More!

Members have asked for another meeting where they could work on projects and get answers to technical questions. The GSBARC Board heard you and is re-introducing that pre-Covid club favorite:
Wednesday Night Open House!

Starting on June 3rd and monthly on the 1st Wednesday of each month will be an extra open house for a variety of projects including:

- ***Projects (building kits, antennas, Go-Kit Setup, etc.)***
- ***Programming help***
- ***Learn GSBARC's logging system (used for club station QSOs, trailer remote operation logging and Field Day)***
- ***Get trained on the club's HF stations located inside the clubroom***
- ***Get help with anything related to amateur radio***

Start time 7:00 PM

Hosted by Steve KD2X and other Board members

On-the-Air Events

Field Day

Field Day is open to the public and will be held from June 28—June 29, 2026, at 200 East Sunrise Highway, North Lindenhurst, NY. Operations will run from 18:00 UTC on June 28 to 18:00 UTC on June 29, with three stations using battery power in all modes. The public is warmly invited. Learn about amateur radio, and experience the excitement of live operations.

Fire Island Lighthouse Event

The Fire Island Lighthouse event will take place during the International Lighthouse Lightship Weekend on August 15–16, 2026. Set up begins at 12:00 UTC, and operations are scheduled from 10:00 UTC to 20:30 UTC on August 16. Two stations will operate using all modes. The lighthouse is designated US0019 and is also identified as IOTA NA-026 and POTA park US-0679. Participants who contact the special event station can receive a certificate to commemorate their involvement.

POTA Activation: Heckscher State Park

GSBARC will host a Parks on the Air (POTA) activation at Heckscher State Park on September 5, 2026. Set up begins at 13:00 UTC, and operations will continue until approximately 20:30 UTC. Operators are encouraged to use the club simplex channel upon arrival. All modes will be used, and the club trailer will be present. Members and guests are invited to join in for a fun and engaging experience.

Suffolk County Marathon

The Suffolk County Marathon will take place on October 18, 2026. All posts are to be manned by 6:00 AM, and the marathon will start at 7:00 AM, running until approximately 2:30 PM. Many posts may be secured earlier. Volunteers interested in helping with this event should contact Suffolkcountydec@outlook.com.

POTA Event to Honor W2TE

The third annual special Parks on the Air event honoring W2TE will be held at Captree State Park Overlook on November 8, 2026, from 13:00 UTC to 20:00 UTC. All operators—including CW, SSB, and digital—are welcome to participate in this meaningful tribute.

PRESIDENT'S MESSAGE

June has arrived, bringing with it one of the club's most anticipated events of the year: Field Day.

Field Day is approaching fast, and we look forward to a weekend of operating, fellowship, and community participation. All members are encouraged to take part in and operate the club's HF station trailers. We recently assessed the radios using the SteppIR antenna on the tower for the remote station, and the equipment performed very well.

Members can prepare for Field Day by gaining hands-on experience with the club's three in-house HF stations. Opportunities include:

- Attend open houses to practice operating on stations that are fully configured and ready for use.
- Visit whenever the EOC is open to operate, ask questions, and become more familiar with the station setup.
- Learn the club's logging software so that contacts can be recorded efficiently during Field Day.

Food service is an important part of Field Day, and several members will be contributing dishes. I plan to prepare pulled pork sandwiches and may also make chili. WB2QGZ will bring stuffed jalapeños, KD2X will provide homemade macaroni and cheese, coleslaw, and macaroni salad, and KA2S will supply cornbread. Members who would like to contribute a dish are encouraged to let us know. We also need volunteers to help pick supplies, including water and potato rolls for the pulled pork sandwiches. A poll will be posted on the club's groups.io page listing areas where help is needed. The more members who take part, the more smoothly Field Day will run, and with teamwork we can make this our best event yet.

Field Day: Saturday, June 27th–Sunday, June 28th

Field Day operations will take place on the east side of Town Hall. Overnight and early Sunday morning operators are especially needed. CW operators are asked to bring their key, as the IC-7100 uses a 1/8-inch plug for keyers.

If you know anyone who may be interested in amateur radio, please invite them to attend Field Day.

The new Field Day shirt design is now in production and is expected to arrive before Field Day. It was great to see so many members order shirts celebrating America's 250th anniversary and GSBARC Field Day. Special thanks to Kevin AB2ZI for creating the artwork for the shirts and jackets. Limited-edition GSBARC merchandise is also available, including a mug with the special Field Day 2026 logo on one side and the regular GSBARC logo on the other, along with special Field Day stickers and a challenge coin. Quantities are limited, so interested members are encouraged to purchase items soon. Thank you again to Kevin AB2ZI for handling the mugs, challenge coins, and stickers. Challenge coins are a great way to support and promote the club, so consider getting one for yourself and a few extras to share with anyone who may be interested in joining.

We had an enjoyable and somewhat successful outing at the American Airpower Museum on May 16th. The weather was excellent, and setup went smoothly despite having a relatively small crew. Thank you to Steve KD2X, Walter KA2S, Jeff KC2ZQO, Scott W2KFG, Bob W2YW, and Tom N2UIC for their efforts. Setup began at 9:30 a.m. We deployed one Buddi-Hex antenna, my Wolf River vertical, two IC-7100 radios, and two networked logging computers. The day began at approximately 50 degrees and warmed up to about 70 degrees. Although AC power initially presented a challenge, John WB2CIK resolved the issue with a long extension cord he had available. We started setting up one north side, just as we got done setting up all the radios, we had to take it all apart and move to south side. This of course compromised our antennas severely. Operating conditions, however, were less than ideal and the antenna placement severely compromised.

The sound of the vintage planes was not heard as they had problems. The sight of the C-130 made the event especially special as we had the opportunity to watch the very large four-propeller C-130 perform a touch-and-go. Operating in such a historic setting is always a rewarding experience.

We initially attempted to operate two stations, but my vertical antenna proved ineffective because of

Continued on page 6...

Pres's Message: continued from page 5...

its location. As a result, we shifted to a single-station operation and rotated operators, which worked well. The computers also performed effectively for logging and digital modes. Special thanks to Jeff KC2ZQO and Steve KD2X for their preparation work, and to the load-out team as well. We concluded earlier than planned because another event was scheduled to begin at 4:00 p.m. Thank you to KC2ZQO, KD2X, W2KFG, KD2ONC, KA2S, W2YW, N2UIC, KE2IEH, KE2IEG, AC2MI, WA2NDV, WB2CIK, KB2USL, KD2PIH, KD2UZT, W2JPM, and KE2HTA for assisting as setup crew, operators, and teardown crew. Thank you also to those who returned to the EOC to help put equipment away. During the event, we debuted the 2026 Field Day stickers and sold a bunch of them. Back at the EOC, we presented Erick KE2IEG and Ethan KE2IEH with a radio and power supply for home use, and Walter KA2S provided them with an antenna until they are able to install a base antenna.

Some of our members were unable to attend the museum event because they were traveling to Hamvention in Ohio. I spoke with Bill WB2QGZ on my way to work on May 13th at approximately 4:45 a.m. as he was preparing to leave. I also received updates from Rob KD2UQK, who was searching for equipment deals, and from Pres W2PW, who reported strong sales from his equipment table. Congratulations to Pres on an extraordinarily successful showing off his salesmanship.

It was also encouraging to see such a great turnout for our May meeting. Everyone in attendance received a complimentary CQ magazine book to take home, and I hope members enjoy reading it, as amateur radio books are always interesting to read.

Our VE team has been especially busy, conducting three VE sessions in May and achieving excellent results in licensing new amateurs. We have also presented three newly licensed Technician-class operators with tri-band HTs to help them get started. In addition, we now have a dedicated laptop reserved exclusively for the VE team. It will remain with the test box and is to be used only for official VE activities.

We have experienced a few issues during our VE sessions and have received related complaints. Beginning with the next VE session, anyone who is not directly involved in the examination process is asked not to arrive before noon for open house. Candidates find it difficult to test when background conversation becomes excessive.

The VE team continues to adapt to the new testing system.

If you plan to take a test, please register in advance at ***Exam.tools.***

As always, June is centered on Field Day.

GSBARC Field Day will be held June 27th–28th on the east side of Babylon Town Hall.

The club trailer will support three main stations, using a Buddi-Hex antenna and an end-fed antenna.

The GOTA station will use the second Buddi-Hex antenna as well as an end-fed antenna.

The satellite station will use my personal satellite station and rotor setup.

Setup will begin at 9:00 a.m. so that everyone can break for lunch together at noon.

We will need some assistance before Field Day, including a volunteer to pick up eight cases of bottled water so that everyone remains hydrated in the event of hot weather.

All modes will be used, depending on band conditions.

On-the-air operations will begin at 2:00 p.m. (18:00 UTC) on June 27th and conclude at 2:00 p.m. (18:00 UTC) on June 28th.

Members can support club projects, and potentially future radio upgrades, by purchasing the special-edition Field Day sticker, coffee mug, or collectible GSBARC 2026 coin. Thank you to everyone who has already preordered coins.

T-shirt payments made by check must be payable to GSBARC. For this fundraiser, we accept only cash and checks.

Special Field Day stickers: $3.00 each or 2 for $5.00

Special-edition Field Day mug: $10.00

Collectible special-edition coin: $10.00

A 50/50 raffle during Field Day weekend, coordinated by Steve KD2X. To win, participants must be present at Field Day on the 28th. Tickets will continue to be drawn at the end of the teardown until a winner is selected.

Our DMR Repeater is working very well when using the DMR repeater, please do not try to steer the local side of the repeater. On the steerable side after connecting to a talk group, please send the disconnect command use the disconnect command 4000 when you are finished. Hold the PTT for approximately six seconds, then release it. You should then hear the message indicating that the link has been disconnected.

Members who would like to monitor the worldwide talk groups may wish to consider purchasing a hotspot. A variety of options are available. I currently use two models: an older RF Shark Open Spot and an Open Spot 2. A hotspot allows users to remain connected to the worldwide talk group for extended periods and communicate globally using their HT.

Where to get your own Hotspot go here https://shop.sharkrf.com/shop Many of the DX contacts will also record the contact on QRZ, making this an enjoyable way for Technician-class members to gain experience with DX communication.

Our June general meeting will be on Thursday, June 25th. It's all about Field Fay and unload the storage room stage the equipment that we be moving out to field day site on Saturday morning.

Field day time line:

June 27th

- Start setting up 0900 — 1400 UTC
- Lunch 1200 — 1600 UTC
- On the air testing 1300 — 1700 UTC
- Start calling CQ 1400 — 1800 UTC

Overnight operators CW operators especially and digital operators this is your time to shine and rank up a bunch of contacts for W2GSB. As always, the overnight operators will also get breakfast delivered to them by me at 7 a.m. Sunday.

We will need early morning operators starting at 08:30 as the overnight guys and gals will be exhausted.

At 18:00 UTC, or 2 p.m., we need help taking everything down.

A Field Day "Must" - All radios must be in operation and calling CQ. Do not hunt and pick. Call CQ and let the stations come to us. If we have a lot of operators, we will take shifts using whatever modes you like to work. The goal is to make as many contacts as possible. No radio is to be left unmanned. Once the satellite station makes its bonus points and there is a Space Station pass, you can use your own call to contact the ISS - once the club call has been used. If you are a brand new amateur you will get the chance to do this and trust me, it is very exciting! Just make sure you write down all the information to get your very cool QSL card from them.

Above is the Sunday morning latte from Barbara KD2PIH which she sent out on May 24th a chilly morning. Her quote was it makes her latte taste way better. Please subscribe to our website at www.gsbarc.org happy DX everyone there is a lot of it out there.

— John Melfi, W2HCB

AMERICAN AIRPOWER MUSEUM ~ ARMED FORCES DAY EVENT


AMERICAN AIRPOWER
MUSEUM


AIR POWER
SOUTH BAY AMATEUR R
XM W2GSB
GREAT
CUB
MUSEUM


QRZ


AIR POWER
MUSEUM


AIR POWER
MUSEUM


Great South Bay
Amateur Radio Club


SL


Great Sout
Amateur Rad


AIR POWER
MUSEUM

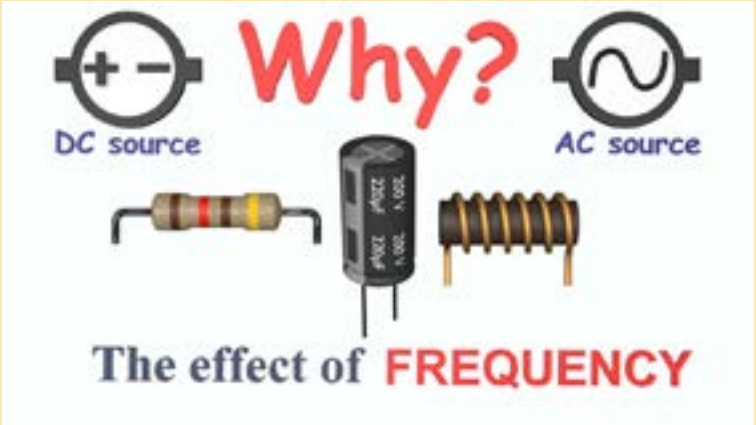

Great South Bay
Amateur Radio Club


Did someone say contact?

TOONING UP

XN2R's first and last satellite QSO

AB2ZI's YouTube Pics



Why Capacitors Block DC but Pass AC (And Inductors do the Opposite!) ?

Why do Radio Waves go THROUGH Walls but Light Can't?

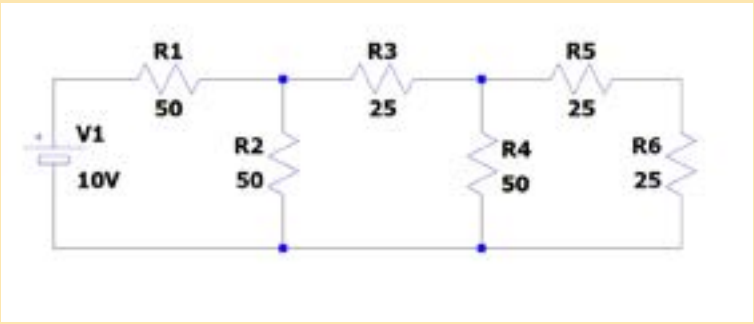
The Mistake That Built Heathkit, and the America That Buried It

In the Classroom...

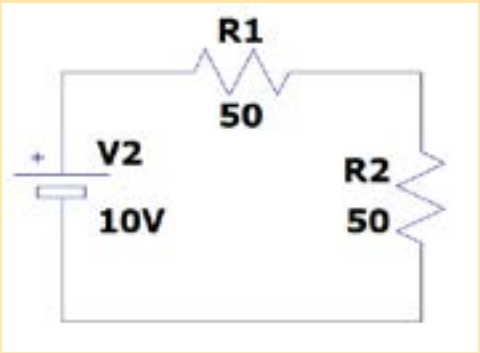
Basic Circuit Analysis: General Class Resistor Exercise

By Kevin AB2ZI

Here we have a series-parallel circuit with a DC voltage applied. Upon first glance this looks like a hard complicated problem. We want to calculate the currents and voltage drops at all components and branches.



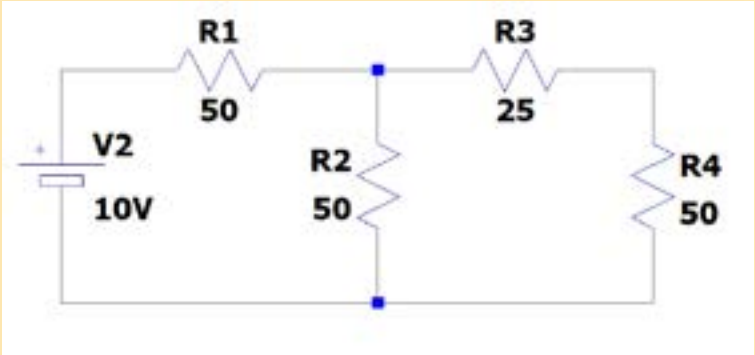
So how do we do that? Let's start by analyzing a simple portion of the circuit and move on from there.



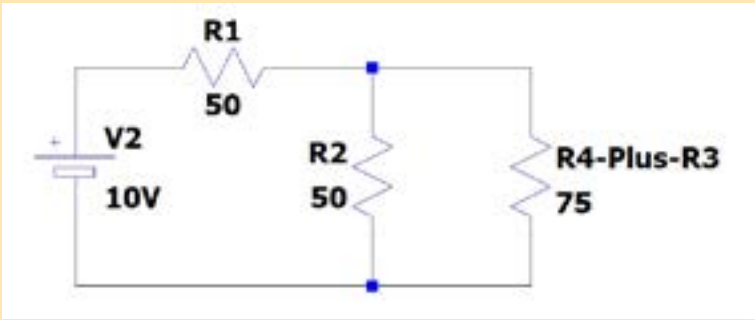
The first section is a simple series circuit. We have two 50 ohm resistors in series giving us 100 ohms of resistance. Total current flowing is calculated with Ohm's law: I = E / R. I = 10V / 100 Ohms resulting in 0.1 Amperes, or 100 milliamperes, flowing.

Since current in a series circuit (or branch, more on that as we proceed) is the same through all components R1 and R2 have 100 mA flowing through them. Because current is the same in all components it is the voltage that divides. Our next step in this case is to determine the voltage drops across those resistors. E = I x R. Both resistors are 50 ohms, so each has a voltage drop of: 100mA times 50 ohms equals 5 volts across them. 5 plus 5 equals our 10 volt supply.

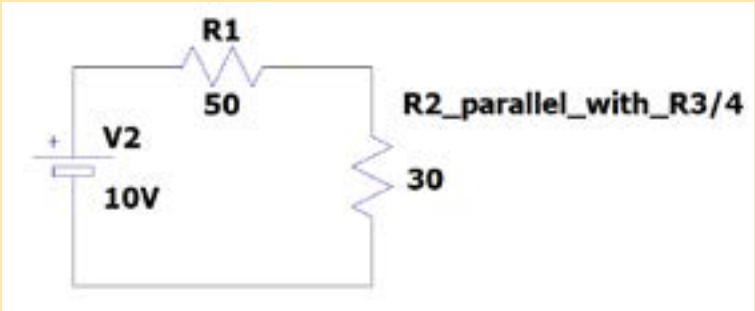
Let's add the next section:



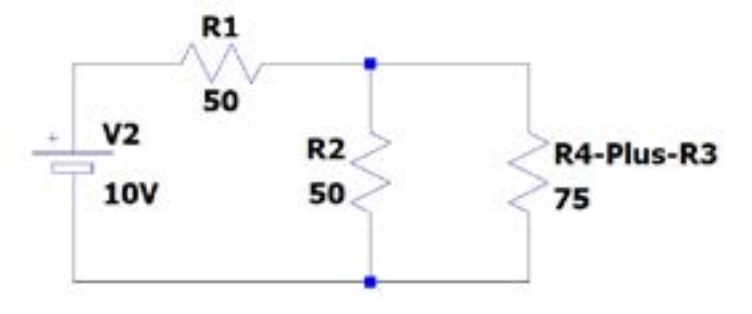
Here we see 2 more resistors that are in series with each other, but are connected in parallel to resistor R2. 25 ohms plus 50 ohms (resistors add in series) results in an equivalent resistance of 75 ohms. That 75 ohms is in parallel with R2's 50 ohms. We can redraw the circuit using this information like this:



Now we have 75 ohms in parallel with 50. Using the 2 resistor formula for parallel resistors, 50 x 75 divided by 50 plus 75 equals an equivalent resistance of 30 ohms. We redraw again…

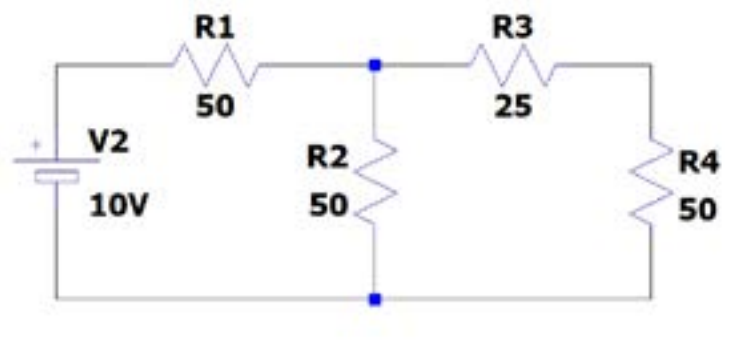


We now have an equivalent series circuit with 30 plus 50 equals 80 ohms. Calculating the current we now have E/R equals 125 mA. The voltage across R1 is 6.25 volts, and the rest of the voltage is across our 30 ohms equivalent resistance: 125 mA x 30 equals 3.75 volts. Remember that the 30 ohms 'resistor' is an equivalent resistance of R4 and R3 combined. If we split it back into 2 resistors we can calculate the currents.



The total current previously calculated to be 125 mA is still flowing. To calculate the current through the branches R2 and 'R4 Plus R3' we use the voltage across R2 that was calculated to be 3.75 V. I = E/R so the current through R2 is 125 mA divided by 50 ohms equals 75 mA, and the current through 'R4 Plus R3' is 3.75 divided by 75 equals 50 mA. Notice that 75 mA plus 50 mA is equal to our total circuit current of 125 mA.

Breaking R4-Plus-R3 back up into their individual components we have:

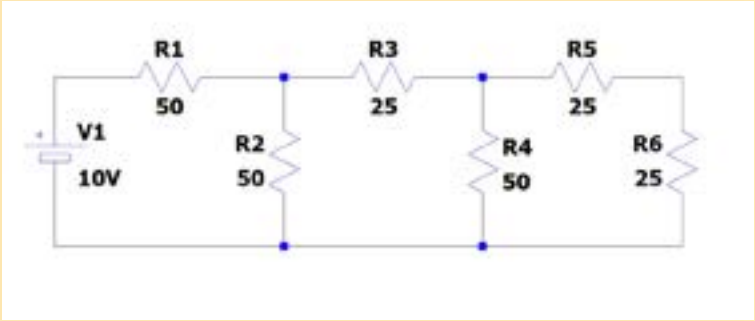


R3 and R4 are in series with each other and we know that there is 50 mA flowing through them so we can now calculate the voltage drop across each of them. (E = I x R). So R3 is 50 mA x 25 ohms equals 1.25 volts, and R4 is 50 mA x 50 ohms equals 2.5 volts. 2.5 plus 1.25 is 3.75 volts! So far so good.

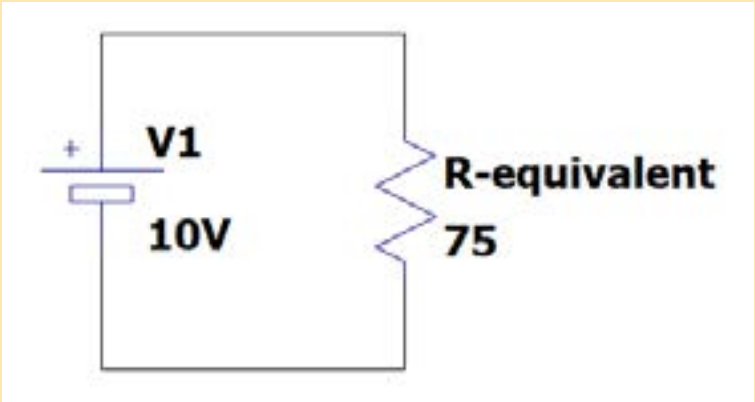
To properly analyze the whole larger circuit we go to the farthest point away from the power source and combine series and parallel branches until we reach a point where we have the battery and a single equivalent resistance (the equivalent resistance is what the battery, or an ohmmeter 'sees').

We then use that equivalent circuit to calculate the total circuit current. Once we have that we start replacing the equivalences in the reverse order and find the voltages and currents for each component.

Looking at our original circuit:



Here's how it would go (this circuit is actually easy enough to do in your head). R5 and R6 are in series and equal 50 ohms. That 50 ohms is in parallel with R4, 50 and 50 in parallel are 25 ohms. That 25 ohms is in series with R3 giving us 50 ohms which is in parallel with R2 which is 50 ohms. 50 ohms in parallel with 50 ohms is 25 ohms and that 25 ohms is in series with R1 for a total equivalent circuit resistance of 75 ohms.



Total circuit current is E / R, so 10 volts divide by 75 ohms gives us 133 mA.

This should be more than enough information for you to calculate all the voltages and currents… give it a try!

73, Kevin AB2ZI


ANOTHER FIELD DAY DAWNS FOR THE GREAT SOUTH BAY AMATEUR RADIO CLUB!
FIELD DAY HEROES
ARRL
SAME TIME, SAME PLACE, SAME MADMEN.
GREAT SOUTH BAY AMATEUR RADIO CLUB
FIRST... THE GEAR!
CAREFUL... SHE'S A HEAVY GIRL.
SHE Purrs!
NEXT... THE ANTENNA!
UP, UP, AND AWAY!
LIKE OUR CONTACTS!
TEAMWORK...
MANY HANDS MAKE LIGHT WORK...
... ESPECIALLY WHEN THEY KNOW WHAT THEY'RE DOING!
AND LOTS OF COFFEE!
CAFFEINE... THE ORIGINAL AMPLIFIER.
HAM RADIO IT'S A CONTACT SPORT


STATION SET. OPERATOR READY.
CQ FIELD DAY! CQ FIELD DAY! THIS IS W2GSB CALLING CQ AND STANDING BY!
BRING ON THE WORLD!
W2GSB 59 59 FROM PENNSYLVANIA!
YOU'RE LOUD AND CLEAR!
LOGGED ANOTHER ONE! DIGITAL, PHONE, FOUR BANDS... WE'RE COOKIN'!
FIELD DAY SCOREBOARD IS TICKIN'!
THAT'S A NEW MULTIPLIER!
BOOM!
WHAT BAND SHALL WE TRY NEXT?
EVERING SETS IN...
EVENING SETS IN...
ANTENNAS UP. SPIRITS HIGH.
LET'S SEE WHAT THE NIGHT BRINGS.


NIGHT OPS... WHERE LEGENDS ARE MADE.
CQ FIELD DAY... THIS IS W2GSB IN NEW YORK LISTENING FOR YOU!
THE BANDS ARE OPEN AND SO ARE WE!
NO SLEEP 'TIL WE HEAR SOMETHING INTERESTING.
IT'S NOT A CONTEST... IT'S AN ADVENTURE!
AND THEN...
THAT'S A WRAP!
GREAT JOB, EVERYONE!
ANOTHER FIELD DAY IN THE BOOKS!
THE FINAL SCORE...
FIELD DAY 2024
QSOs..... 1,287
BANDS..... 19
MULTIPLIERS..... 612
POINTS..... BIG!
NOT BAD FOR A BUNCH OF RADIO NERDS!
WE PREFER "ENTHUSIASTS."
UNTIL NEXT YEAR...
GOOD FRIENDS. GOOD RADIO. GOOD TIMES.
GREAT SOUTH BAY AMATEUR RADIO
THAT'S WHAT FIELD DAY IS ALL ABOUT.
73, EVERYONE!
Bruce Breithaupt

GSBARC LIMITED TIME SPECIAL 250 USA / 2026 FIELD DAY MERCH!

- **Limited time 250th/Field Day Mug with 250th USA graphic on one side and the regular GSBARC logo on the other. Only 40 will ever be made. 11.8 oz. $10 each.**

- **For the first time ever we are presenting a 2" two-sided "challenge" type coins. 250 have been ordered thanks to over 120 pre-orders raising the money at $10 apiece.**

  Members can still pre-pay for coins by visiting the *gsbarc.org* website and click on the DONATE button.

- **Unfortunately the Field Day shirts order window has closed and the shirts have been ordered. A few extra shirts were ordered to sell. — 73, Kevin AB2ZI**

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. 5PL)

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 ***ARRL License Manuals*** in stock and available for purchase at the discounted rate of $30 (normally $32.95 plus shipping).

2026 VE Sessions

- ~~January 31st~~
- ~~February 28th~~
- ~~March 28th~~
- ~~April 18th~~
- ~~May 30th~~
- June 20th
- July 25th
- August 29th
- September 26th
- October 31st
- November 28th
- December 26th

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

GSBARC Repeaters

2026 Contests

ARRL Int'l Digital Contest:

June 6th – 7th

VHF Contest:

June 13th – 15th

ARRL Field Day:

June 27th – 29th

IARU HF World Championship July 11th –12th

CQ WW SSB Contest

October 24th – 25th

ARRL November Sweepstakes:

CW: November 1st – 3rd

CQ WW CW Contest November 28th – 29th

ARRL November Sweepstakes:

SSB: November 21 – 23

ARRL 10 Meter

December 12th – 13th

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...