



ARCOVER



South Bay Amateur Radio Club

W6SBA

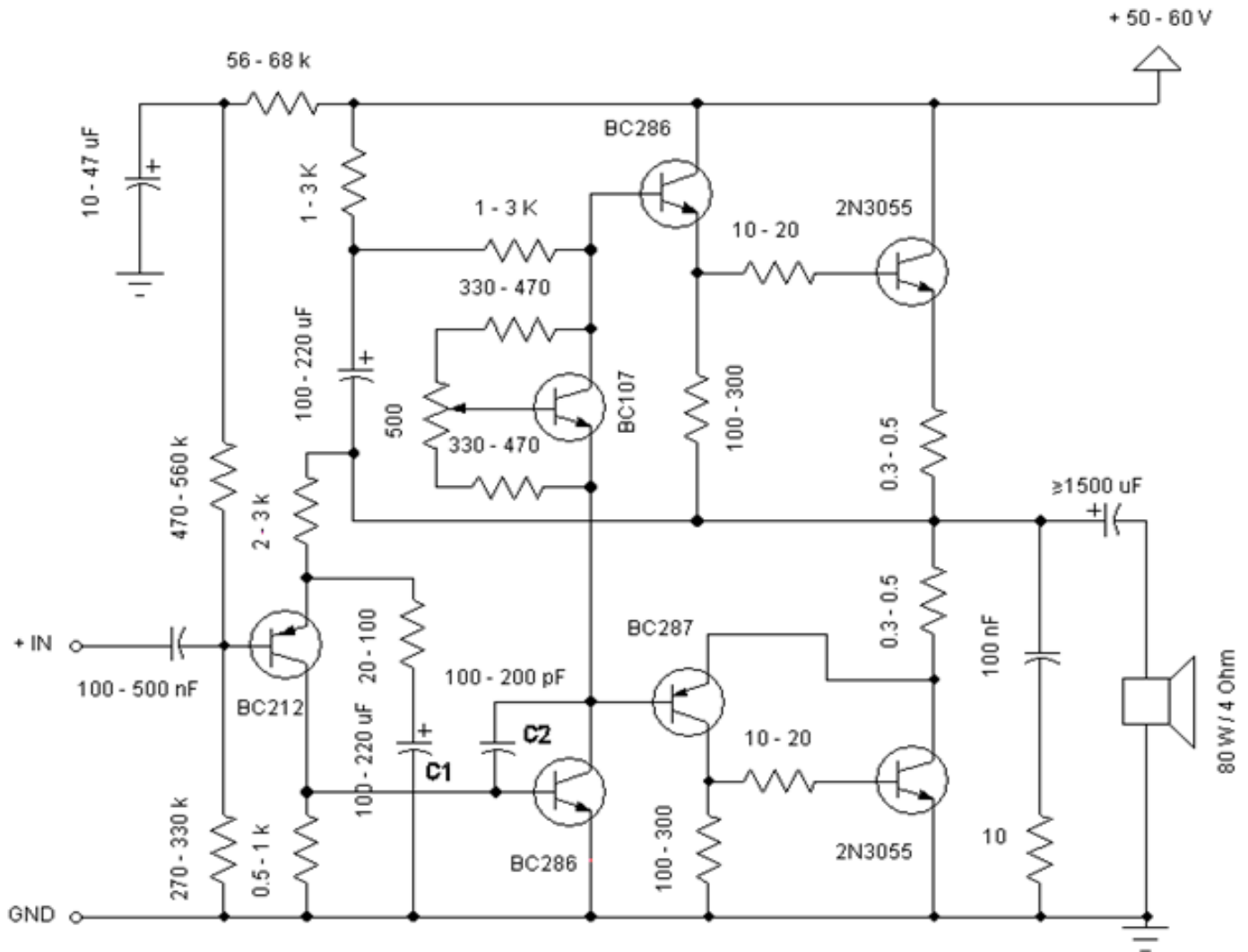
E-mail: W6SBA@arrl.net

A Community Service Organization
Dedicated to Amateur Radio Since 1970

Website: <http://www.w6sba.org>

President - Alex - KD6LPA

April 2010



Do It Yourself Electronic Projects -- Presented by Alan KG6ZPL

For our April meeting, Alan - KG6ZPL will present a talk titled "**Home Brewing or Tom Swift Builds a Radio**". In the talk he will discuss the choice of basic tools needed for electronic construction, how to solder and the proper choice of a soldering iron, as well as different construction techniques for small projects. The SBARC Interface construction project (a soundcard interface) will also be discussed.

Pictured above: Sample schematic of a power amplifier

“Navigating Electronics with a GPS”

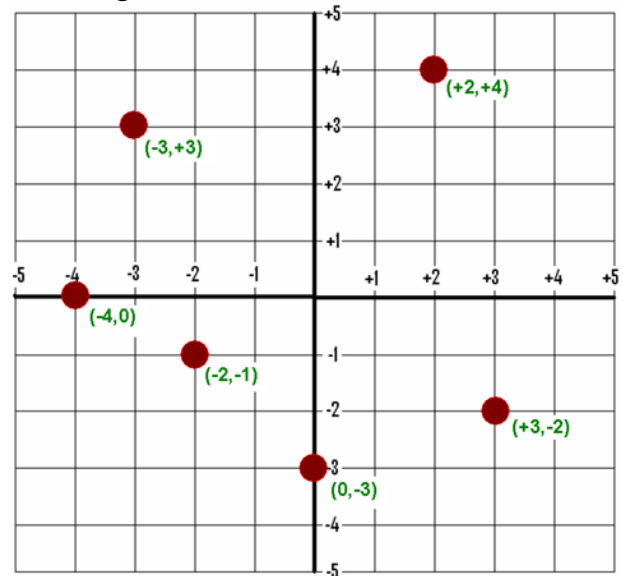
By Alex Marko

In our last issue, we learned who is *Eli* the *Ice* man was, and why he’s important for remembering important properties about inductors and capacitors. This month, we’re going to use basic navigation skills to conquer mathematics!

If you know the compass headings, North, South, East and West, you’ve already mastered the concept of rectangular and polar coordinates in math. Imagine you’re in your car and your asking someone for directions to get to a restaurant. Your friend tells you to go EAST for 2 blocks, then make a left (turning NORTH) and go 4 more blocks to your destination.

In math, this is called a rectangular coordinate system. We draw a graph comprised of two lines, and it’s basically just like the map we you for navigation. The horizontal line is the X axis (traveling EAST and WEST), while the Y axis (travels NORTH and SOUTH). Where they intersect is the center, and can be thought of as your starting location, or present position.

So using rectangular coordinates to describe the location of our restaurant, we would simply say $(+2, +4)$. Meaning, from your current location (the center), go 2 blocks to the RIGHT, then 4 blocks NORTH. In rectangular coordinates, the horizontal or X axis is stated first, then the vertical or Y axis. So every intersection on the map can be thought of as a coordinated pair (x, y) .



Let’s try another one. An IMAX 3D movie theater just opened up, and you want to go to it. So again, we start at the center, except this time we’ll use rectangular coordinates and then translate them back into conventional map notation. Okay, the theater is located at $(+3, -2)$. So, to get there, we need to go 3 blocks to the RIGHT or EAST. Then, turn SOUTH and go 2 more blocks. Hopefully, this is starting to make a little sense.

Okay, one more trip. The new mall opened up on the other side of town. It’s location is $(-3, +3)$. So, starting from the center, we need to go 3 blocks WEST, then 3 blocks NORTH. Tada!

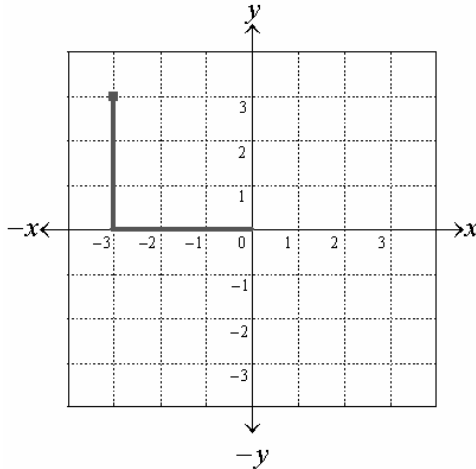
In this last visit to the mall, both the X and Y coordinates are a distance of 3 blocks in both the NORTH and WEST axis. So you might say, that the mall is in the NORTHWEST quadrant of the city.
(continued on page 3).



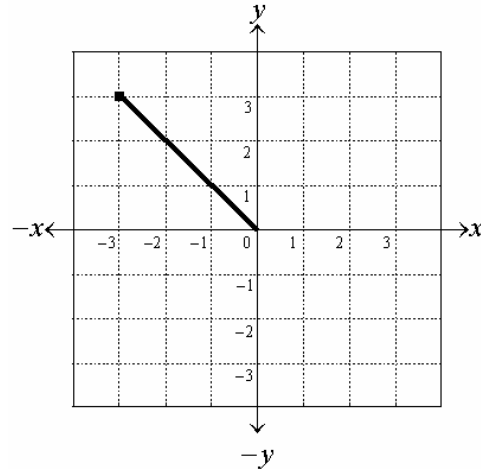
“Navigating Electronics with a GPS (continued)”

Rectangular coordinates (x, y) are fine when you’re traveling on the ground. But suppose you were up in the air, let’s say a helicopter. You probably wouldn’t bother going WEST for 3 blocks, then NORTH for another 3 blocks. Wouldn’t it make more sense to fly directly there diagonally, in a NORTHWEST direction? Consider the two routes below:

RECTANGULAR ROUTE



POLAR ROUTE



Both routes take us exactly to the same destination. But the POLAR route is definitely shorter and gives us a sense of the overall direction of our intended destination.

In electronics, resistance is designated on the X axis. Capacitors and Inductors are on the Y axis. The easy way to remember is that **I**nductors are on the **N**ORTH side of the graph, so capacitors must be on the **S**OUTH side of the graph. The abbreviations guy who gave ELI the ICE man a headache last month, is still hard at work. This time for AC electronics, he decided to rename the Y axis to the J axis. So instead of saying (+2, +4), we now say $2 + j4$. Another example: instead of (+3, -2), we now say $3 - j2$.

Remember, **RESISTANCE** is the first part, and the **REACTIVE** portion (inductor or capacitor) is the second part of the J coordinate notation.

E5C22: In rectangular coordinates, what is the impedance of a network comprised of a 10 microhenry **inductor** in series with a **40 ohm resistor** at 500 MHZ.

- A. $40 + j31,400$ B. $40 - j31,400$ C. $31,400 + j40$ D. $31,400 - j40$.

Okay, don’t panic! The question says there’s a 40 ohm resistor. Since **RESISTANCE** always comes first, we know the answer starts with 40 something. So we can automatically rule out answers C and D. The second key word is Inductor. Remember **I**nductor is **N**ORTH! And **NORTH** coordinates are positive. So, the answer must be **A) $40 + j31,400$** . More next time!

New Lunch Place Hits the Spot!

This month, we decided to try a new place for our monthly luncheon, and I'm happy to report that it was a big success! The new place is called the "New York Deli" and it's located at 2424 Sepulveda Blvd in Torrance, right next to El Paso Cantina.

The food was certainly enjoyed by everyone along with the camaraderie from the group. There was one small hiccup -- this restaurant does not give individual checks, so there was some difficulty sorting out the cost for everyone's lunch. Alex did ask the management afterwards and was informed that their present policy doesn't permit individual checks for large groups. As a workaround, they can itemize the check by person to make it easier to divvy up the bill at the end of the meal.

All in all, it was a great eating experience and we look forward to going there again soon. If you prefer our previous lunch location, please bring it up at our next club meeting, or send an email to the council. Otherwise, based on the positive feedback gathered from those in attendance, we will probably make this our new monthly spot.



SPECIAL RECOGNITION!

Bob Avakian-WA6KZF

Our own Bob Avakian recently received an award from the ARRL for being A member for 50 years. This is a big accomplishment for Bob, and we wanted to recognize him and also thank him for being a member of our club for so many years!

Congratulations Bob!



FREE STUFF FROM HARBOR FREIGHT!!!

Go to this web address and print the coupon for a FREE flashlight!

http://www.harborfreightusa.com/html/MagazineLanders/3-general/images/flash_c.jpg

Here's another coupon good for a FREE screwdriver set!

http://www.harborfreightusa.com/html/SingleMagLanders/popscience_v2/images/screwdriver_c.jpg

Amateur Radio Course

FCC “Technician” course (entry level)

It will be a 2 session course

**The sessions will be on 24 April & 1 May
From 10:00 AM to 2:00 PM both Saturdays**

Bring a lunch

The FCC test will be 10:00 to noon on 8 May

The location is Hesse Park

29301 Hawthorne Blvd.

Rancho Palos Verdes

- No pre-registration required -**
- Taking the FCC Test is \$15 -**

Optional Material

- Gordon West book with the FCC test questions, \$21 -**
- Copy of my Power Point charts, \$15 -**

**Students thru grade 12 who take the course and get
their Technician license will be reimbursed up to \$50 by
The Palos Verdes Amateur Radio Club**

**For more information contact
Walt, K1DFO, at walt.ordway@yahoo.com**

FINAL REMINDER: ANNUAL DUES

The following members have renewed their membership in addition to those listed in the March issue:

Dee-KB6DEE	551472	Alan-K6MU	551473	Bob-WA6KZF	551475
Mark-KA6ZTO	551474	Caroline-KI6LJN	551476	Bill-KQ6Z	551477
Howard-KF6NOR	551478	Bob-KI6MNK	551479	Rich-KG6JKJ	551480
Scott-N6LEM	551481	Glenda-KF6QFE	551481		

The cost for an individual membership is \$20. For two members of the same family is \$30. Three or more members (family membership) is also \$30. However, the family membership is a special case where only one person in the family gets to vote. Other family members are eligible for attendance drawings and all other privileges. If you have any questions, please contact Joe, WB6MYD.

If your name did not appear in either February, March or April listings, that means the Secretary hasn't received your annual dues. Please take a moment of your time and renew your membership in our club. Your continued support and participation is greatly appreciated. As an added bonus, we are issuing membership cards for you to carry in your wallet which will be distributed to you during club meetings.

Please make your check payable to the SBARC and mail to the following address:

**South Bay Amateur Radio Club
Post Office Box 536
Torrance, CA 90508-0536**

CLUB SERVICES:

License upgrades and / or new license testing
VE Sessions are held the 2nd Saturday of every even month
Need to sell something at the Swap Meet?
ARRL Membership renewals or new registration
Club Name Badge / Jackets

CONTACT:

Joe, WB6MYD
Joe, WB6MYD
Joe, WB6MYD
Joe, WB6MYD
Joe, WB6MYD

POSITION:

Secretary / Treasurer
Secretary / Treasurer
Secretary / Treasurer
Secretary / Treasurer
Secretary / Treasurer

Club Operation
Need something posted on the web site, or newsletter?
Ideas for Club Speakers, Field Day Planning
Membership, Health & Welfare
Upcoming Club Events
Club Activities

Alex, KD6LPA
Alex, KD6LPA
Ray, WA6OWM
Brian, KI6ERR
Jerry, KI6RRD
Alan, KG6ZPL

President
Editor / Webmaster
Vice President
Council Member
Council Member
Council Member

If you have questions about your ham equipment, please feel free to ask any of our club members for help. Or, if you'd like, please talk to any council member, and we'll do our best to help you.

"Elmering" is available to every member, please ask any officer, and we will find a knowledgeable club resource for you.

You're a member of one of the best clubs in the area, and we want your help to make it even better. If you have a suggestion or an idea for improvement, we want to hear from you. Please feel to contact any council member by phone or email.

NOTES FROM THE SECRETARY JOE-WB6MYD
e-mail address - jlphen@ca.rr.com 310-328-0817



1. **Armed Forces Day Parade:** Yes, it's that time of year again and plans are already underway to support the Torrance Armed Forces Parade, Saturday May 15. Our group helps line up the parade participants in the staging area. If you're interested in helping out, please contact Ray Grace.

2. **New Member:** Please join me in welcoming Caroline - KI6LJN, a Technician class from Torrance, CA. Caroline's interests include HF, social functions and club activities. Welcome to the club Caroline, and thanks for joining us!



3. **Special Olympics:** This worthy annual event at Cal State Long Beach will be held on June 12 and 13th, 2010. E-mail Mark Lidikay mlidikay@holdenandrew.com to sign up.

4. **ARRL SW Division Convention:** The plan for the 2010 ARRL SW Division in San Diego on September 17-19, 2010. Remember 2010 is in San Diego and of course we are next with the 2011 SW Div convention in our area.

5. **Attendance Drawing:** John - AC6FB was the lucky winner for the \$30 kitty in March. Congratulations John! Since the winner was present, the kitty will be reset to \$20 for our next meeting. Remember, you must be present to win, and be a member in good standing.

6. **Services:** Please remember to renew or become an ARRL member through the club. (Contact Joe for details). The club benefits by getting a commission, so please help us out. Also, if you'd like to order a name badge, they can be ordered for \$10. Phone patch subscription is available for \$40 annually.

7. **Weekly Net:** Join us every Thursday night at 7:30PM on the W6SBA repeater to hear all the latest and enjoy the conversation by your fellow SBARC members. (No net occurs on the day of club meetings)

8. **Reminder:** Remember the Club Services available to you as shown in the ArcOver are for you! Please feel free to ask for and seek the assistance from any of the officers and anyone you think might be able to help you! We're all in this together!

CLUB OFFICERS FOR 2010:

President, Alex Marko - KD6LPA
kd6lpa@socal.rr.com - 310-530-6614

Vice-President, Ray Grace - WA6OWM
wa6owm@arrl.net - 310-370-1913

Secretary/Treasurer, Joe Lanphen - WB6MYD
jlphen@ca.rr.com or w6sba@arrl.net - 310-328-0817

Past President, Richard Whited - KG6JKJ
rbwhited@yahoo.com - 562-756-7103

Activities Council Member
 Alan Parks, KG6ZPL
aparks@raytheon.com - 310-558-8718

Events Council Member
 Jerry Shaw, KI6RRD
shaw@scsenginc.com - 310-374-5252

Membership Council Member
 Brian Smith, KI6ERR
brian.sbarc@yahoo.com

CALENDAR

Council Meeting - 1st Wednesday of the month
Call Joe - WB6MYD (310) 328-0817

Club Meeting - 3rd Thursday of the month
April 15, 2010 @7:30 p.m.
Torrance Memorial Medical Center
West Tower, 2nd Floor, Room "A"

Club Nets - **W6SBA WEEKLY NET**
Every Thursday @7:30pm
(except the night of club meetings)
PVUSD EMERGENCY NET
1st Tuesday of the month
09:30 Hours on the W6SBA repeater

TRW Swap Meet Saturday, April 24, 2010 @7-11am

VE Session - June 12, 2010
West Tower, 2nd Floor, Room "A"
Contact: Joe WB6MYD
Phone: (310) 328-0817
jlanphen@ca.rr.com or w6sba@arrl.net

Social Lunch - 2nd Saturday, June 12, 2010, @12pm
New York Deli
2424 Sepulveda Blvd
Torrance, CA 90501 (310) 891-1229

CLUB SERVICES

Awards Manager (HF/VHF)	Cliff - K6LH
Health & Welfare	Brian - KI6ERR
Swap Meet Chair	Joe - WB6MYD
VE Test Liaison	Joe - WB6MYD
VE Test Sessions	Joe - WB6MYD
Webmaster	Alex - KD6LPA
Editor	Alex - KD6LPA
Proofreader	Vacant

South Bay Amateur Radio Club Repeater

224.38 MHz ·PL - 192.8 Hz Offset -1.6 MHz
(See Calendar for Weekly Net Times)

NEWSLETTER SUBMISSION

South Bay Amateur Radio Club
P.O. Box 536
Torrance, CA 90508
W6SBA@arrl.net
Website: <http://www.w6sba.org>

TO:

Address Correction Requested

A COMMUNITY SERVICE ORGANIZATION

W6SBA

South Bay Amateur Radio Club
Post Office Box 536
Torrance, CA 90508-0536

