

BUSINESS NAME

President's Message

Hello everyone! This month our presentation will be "The Buddipole Antenna System" by our own Ray Grace. I'm sure that he will also talk about the rigors of his DXpedition to the wilds of Hawaii. He has also confirmed a presentation by Dr. Robert Piccioni, "Einstein for Everyone" for our March 17th meeting. Ray is working on a number of very interesting future presentations ranging from Dstar to emergency power so we will continue to have interesting and exciting meetings. We have reserved the Toyota Car museum for the third Thursday of both June and July. We will probably meet there one or both of those months.

We are definitely going to have a combination operating session and bar-b-que at a local park. Right now we are considering having it on either May 7 when there are several QSO parties or on June 7 for the ARRL VHF QSO Party. If we pick the May date we will operate on HF, if in June we will be on VHF / UHF. We will pin down the data as soon as possible so that you can put it on your calendars. We might substitute it for our monthly luncheon.

The club Council has OK'd Ham related classified ads for the Arcover on a space available basis. So, if you have something that you want to sell, buy, trade, etc., write up a short ad and submit it to Mike at mkosidlak@yahoo.com. His decisions on acceptability will be final. At the January meeting Jim Hill suggested to me that the club purchase an antenna analyzer. I presented his idea to the Council. Everyone likes the idea and we approved the purchase. We are now in the process of deciding which one to buy. While the details still need to be worked out, the plan is to use it as the basis of a meeting presentation on its use together with some "hands on" training. We then want to make it available for loan to club members. We intend to make this a pilot program. If it works out, we will consider the purchase of more equipment in the future. For now, the Council feels that the purchase of one or more transceivers is not warranted. If we have more operating events in the future where club equipment would be used, we may reconsider this issue.

February Guest Speaker

RAY GRACE, Subject: The Buddipole

"A Buddipole is an antenna for VHF and HF communications constructed from small, lightweight parts for portable and temporary use. (Note that many people use one as their permanent antenna.) There is no "one Buddipole" antenna; the Buddipole is a system that can be assembled in any number of ways to fit a particular purpose. This book will describe how to select the best Buddipole configuration for a variety of situations



including working from a beach, hilltop, balcony, or field. The *Buddipole* antenna system can be used to construct antennas covering 7 MHz – 148 MHz in horizontal dipole, vertical dipole, vertical monopole, or other configurations. Lower bands are possible with additional components. Where full-sized antennas can be configured the *Buddipole* provides an antenna equal in performance to permanent antenna alternatives. Shortened antennas can be constructed using loading coils, and these perform surprisingly well *when deployed properly.* There are many "standard" antenna configurations, but it can also be fun and effective to create your own designs." - From the Forward by **Chris Drummond,** W6HFP, President, Buddipole, Inc. which is in the book Buddipole in the Field, by **B. Scott Andersen,** NE1RD

CLUB OFFICERS FOR 2011:

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Lesson for the Day...

At the January meeting, a VTVM (vacuum tube volt meter) was briefly discussed. I mentioned that its virtue, as compared to a VOM (volt-ohm-miliamp meter), was that it had a high fixed input impedance so that it didn't load the circuit as much. Why is this important? For the purposes of this discussion, I am going to let impedance and resistance be the same. First, recall the formula for resistance in parallel. Whereas resistance in series simply add, R = R1 + R2, resistances in parallel add as their reciprocals, that is 1/R = (1/R1) + (1/R2). This is the same thing as $R = (R1 \times R2) / (R1 + R2)$. A frequently used analogy for this is to think of resistors as pipes and amps as the water flowing through them. If we put several pipes in parallel, the amount of water flowing through them goes up since the effective cross sectional area of the pipes has increased. For resistors, this means that the total resistance has gone down. So, in series, resistance goes up, in parallel, resistance goes down. How does this affect a volt meter?

Let say that we have a circuit with a resistance of 10 ohms, and a current of 10 amps. Using Ohm's Law, the voltage drop, E, across the resistance is $E = I \times R$ or $E = 10 \times 10 = 100$ volts. So, when we place the probes of the volt meter across the resistor, we want to get a reading of 100 volts. But, the volt meter has some internal resistance of its own. In effect, we have placed a second resistor in parallel with the first one. Let's say that the internal resistance of the volt meter is 10 ohms. Then the combined resistance is $R = (10 \times 10) / (10 + 10) = 100 / 20 = 5$ ohms. Substituting this in Ohm's Law. the voltage drop across the two resistances is now $10 \times 5 = 50$ volts. This is what the volt meter would measure! Clearly, this isn't good. Now, suppose that the internal resistance of the meter is 100 ohms. Then the combined resistance is $R = (10 \times 100) / (10 + 100) = 1000 / 110 = 9.1$ ohms. This yields a voltage drop of 91 volts which is closer to the true voltage of 100. Increasing the internal resistance to 1000 ohms yields a voltage drop of 99 volts. VTVM's typically have an internal impedance of 11 Megaohms or 11,000,000 ohms. In our example, we would measure a voltage drop of 99,9999905 volts. The meter would read 100 volts which is what we want. The VOM's of the period were essentially a meter in series with a resistance and had a far lower and variable internal resistance and were therefore less accurate than VTVM's. Please note that modern solid state meters have impedances similar to VTVMs so circuit loading is less of an issue than it used to be. ~ ALAN

CLUB SERVICES:	CONTACT:	POSITION:
License upgrades and / or new license testing VE Sessions are held the 2nd Saturday of every even month	Joe, WB6MYD Joe, WB6MYD	Secretary / Treasurer Secretary / Treasurer
Need to sell something at the Swap Meet?	Joe, WB6MYD	Secretary / Treasurer
ARRL Membership renewals or new registration	Joe, WB6MYD	Secretary / Treasurer
Club Name Badge / Jackets	Joe, WB6MYD	Secretary / Treasurer
Club Operation	Alan, KG6ZPL	President
Need something posted on the web site, or newsletter?	Alex, KD6LPA	Webmaster
Ideas for Club Speakers, Field Day Planning	Ray, WA6OWM	Vice President
Membership, Health & Welfare	Mike, KI6LJM	Editor / Member
Upcoming Club Events	Paul, KK6BY	Council Member
Club Activities	James, KI6UPL	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.

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

Bruce writes to us with some interesting kits he ran across....

A few weeks ago we were asked to think of a few topics that might be of interest to our radio club, to be placed in ARCover. I thought of a few.

I have been toiling with one of Tony Parks KB9YIG small SDR kits. For \$20 he has offered a complete SDR radio receiver on a chewing gum size double-sided board complete with all parts, including about 10 surface mount capacitors, diodes, and chips. He frequently sells out of these but it is quite an exciting project when they are available. He provides many redundant extra parts to allow creation of a dedicated 20, 30, 40, 80, and even 160 meter single band receiver. For a little more than twice the price he will offer a more complicated multi-band receiver that involves winding 14 coils and torroids. For about the same price he will occasionally offer a yet even more complicated transceiver. These kits require considerable eye hand coordination and also made me feel that I was performing angioplasty on a package of double mint gum. www.KB9YIG.com

I perfected my technique by building a double-sided 10 Watt QRP surface mounted multi resistor, dummy load, SRW and Watt meter available through Doug Hendricks Ki6DS. The kit is also about \$20 and does not involve any winding of coils or torroids and unlike the SDR kits comes complete with all necessary attachments. For the faint of heart it comes with through the board resistors allowing assembly of this project without requiring SDR mounting. www.QRPkits.com.

I put together some of these kits with direct soldering and others with the use of a modified toaster oven and solder paste technique as described in the last months QST magazine. To avoid conflict with my XY L., I purchased my own inexpensive toaster oven for about \$20 which allowed me to drill a hole in the back of the and place a thermal probe from my \$20 multimeter to allow careful monitoring of heating and solder flow.

So for the cost of about a tank of gas I have found some really cool projects.

My final project included putting together a 9: 1 balun with a 33 foot wire which acts as an excellent end wire field antenna which is an excellent companion for my FT-817 QRP transceiver. This combination works excellently with my small matching tuner. This kit complete with the wire cost \$30 and includes an aloha newsletter from the Hawaiian club which is making available as a project. (This for the cost of one half of the tank of gas

www.earchi.org

More information to follow

73 de Bruce KJ 6 CSI

Two Amateur Radio Courses

FCC "Technician" course (entry level)
FCC "General" course (2nd level)
Each course is 2 sessions

The 2 sessions are on February 26 & March 5
Technician 10:00 AM to 2:00 PM both Saturdays
General 2:15 PM to 5:00 PM both Saturdays
FCC tests will be 10 AM to noon on March 12

The location is Hesse Park 29301 Hawthorne Blvd. Rancho Palos Verdes

- No pre-registration required No fee for either course -
- -Taking the FCC Test is \$15 -

Optional Material
- Gordon West book with FCC test questions,
\$22 for Technician
\$23 for General

- Copy of my Power Point charts, \$18 for Technician \$15 for General

-Students (thru grade 12) who take this course and gettheir license will be reimbursed up to \$50 by the Palos Verdes Amateur Radio Club

For more information: walt.ordway@yahoo.com

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



1. Attendance drawing: Rich-KG6JKJ ticket was drawn at our January meeting. Rich unfortunately attended another function and was not able to join us. The February drawing will be for 35 Dollars, be sure to be with us if you wish to be the lucky winner. The following is a listing of members paid for 2011:

Name	Call	Drawing #	Name	Call	Drawing #
Ray	WA6OWM	551510	Craig	KD6AKX	551511
Arthur	WS6U	551512	Marjorie	KG6HPR	551513
Darryl	W6JII	551514	Alexander		551515
Bill	KQ6Z	551516	John	KG6IMP	551517
Brian	KI6ERR	551518	Clyde	WB6HLS	551519
Jim	W6IVW	551520	John	AC6MG	551521
Shirley	KF6EXI	551522	Kostek	K6MNA	551523
Alan	KG6ZPL	551524	Betty	N6VZF	551525
Dick	W1MII	551526	Harlan	KC6YBJ	551527
Hal	KO6M	551528	Mike	KI6LJM	551529
Bruce	KJ6CSI	551530	Paul	KK6BY	551531
Howard	KF6NOR	551532	Richard	WA6HYI	551533
Chuck	KN6H	551534	Gary	WD9DUI	551535
Joe	WB6MYD	551536	Stephen	KC6EID	551537
Alex	KD6LPA	551538			

- 2. Please remember, dues are due and payable. If you pay by check (preferred) make it payable to the SBARC and is 20 dollars for single membership and 30 dollars for Associate or family membership. Please submit it to **PO Box 536, Torrance, CA 90508-0536**. We thank those of you having renewed for your continued support and look forward to listing again as many if not more of you next month. Remember this is your club we do appreciate and are very grateful to your continued support.
- 3. Special Olympics: The Special Olympics is always looking for a lot of good HAMs to help out at Cal State Long Beach on June 11-12, 2011. This is a very rewarding and worthy event for which your help is greatly appreciated. See me for contact information.
- 4. Thank you: Our guest speaker at the January 20, 2011 meeting certainly made a good case for enjoying an DXpedition to some far out place. Dr. Arnold-N6HC showed us all about Midway Island-K4M from his latest DXPedition adventure. Wow what a place making over 61000 2 way contacts. If you did not attend, shame on you sure missed one heck of a presentation. Thank you Arnie.
- 5. New Arc Over: Well it is not new of course but we do have a new editor. We thank Mike-KI6LJM and XYL Irene for this new years edition of the Arc Over. We look forward to the future issues which I am sure will be as great as this first one and will likely be better as time goes on. Thank you for stepping up to the plate. News articles and or other worthy news to our group may be send to Mike-KI6LJM as listed on your membership roster. Thank you again Irene and Mike and may I add "keep up the good work".
- 6. ARRL SW Div Convention: Time does not stand still folks, January is almost history and will be by the time you read this. So I wish to remind you about the convention which plays in our own back yard at the Marriott Hotel by the Del Amo Center. The dates are September 9,10 & 11, 2011. Please see Paul or any officer for your "Early Bird" reservation (special price you know). The club as in the past plays a role in all of this and we will need your assistance. Please mark your calendar for those dates. Early Bird pricing must be postmarked/submitted before May 31, 2011. Thank you.
- 7. New Member: Please welcome Stephen-KC6EID, Novice to our group. Stephen's interest is in computers, public relations and the club repeater. He also wishes to participate in our VE sessions and technical discussions. He is the proud owner of a 220 transceiver which I hope he will use to join us on our Thursday night net (special invitation here Stephen).

CALENDAR

Council Meeting - 1st Wednesday of the month

Call Joe - WB6MYD (310) 328-0817

Club Meeting - 3rd Thursday of the month

February 17, 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, Feb. 26, 2011 7-11:00 a.m.

VE Session - April 9, 2011

West Tower, 2nd Floor, Room "A"

Contact: Joe WB6MYD Phone: (310) 328-0817

jlanphen@ca.rr.com or w6sba@arrl.net

Social Event - 2nd Saturday, March 12, 2011 @12pm

Hof's Hut

23635 Crenshaw Blvd

Torrance, CA 90505 (310) 325-0470

CI	TID	SERV	TOTO
	JUK.	SEKV	11 11/2

Awards Manager (HF/VHF) Cliff - K6LH

Health & Welfare Mike - KI6LJM

Swap Meet Chair Joe - WB6MYD

VE Test Liaison Joe - WB6MYD

VE Test Sessions Joe - WB6MYD

Webmaster Alex - KD6LPA

Editor Mike - KI6LJM

Proofreader Alex - KD6LPA

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

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Address Correction Requested

V COMMUNITY SERVICE ORGANIZATION

Vas9W

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

