



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

February 2009



**TORRANCE MEMORIAL MEDICAL CENTER
ROOM "B"
WEST TOWER, 2ND FLOOR**

3330 W. Lomita Blvd., Torrance, CA 90505
On Medical Center Drive
With parking in the structure behind the West Tower

THURSDAY, February 19, 2009

TOPIC:

"ARRL"

Presented by Marty Woll, N6VI

ABOUT THE SPEAKER:

This month's speaker Marty Woll, N6VI, has been an active amateur radio operator since 1967 and is now an Extra class operator. He has used everything from "boat anchor" tube sets to the latest technology the hobby has to offer. As an avid contester, DX'er, and VE, Marty also is very active in ARES and works tirelessly to help organize and train ham operators in emergency operating techniques. In 2007, Marty was elected as the Vice Director of the Southwestern Division of the ARRL. This gives Marty great insight into the workings of the League and gives our division another excellent resource of knowledge and information about what the League is working on behalf of amateur radio and will be sharing that with us as our featured speaker. For those of you who are not ARRL members, this is an excellent opportunity to ask questions about the League. Please join us in welcoming Marty to our club for an informative and fun evening.

PLEASE JOIN ME IN WELCOMING OUR CLUB'S NEWEST MEMBERS:

Clyde Reed -- WB6HLS

Clyde is a retired civil engineer and enjoys participating in Field Day, various contests, and club meetings. Thank you Clyde for joining our club, and welcome!

John Bacon - KG6IMP

John is a mechanical engineer who has interests in VHF/UHF as well as emergency communication. Thank you John for joining our club, and welcome!



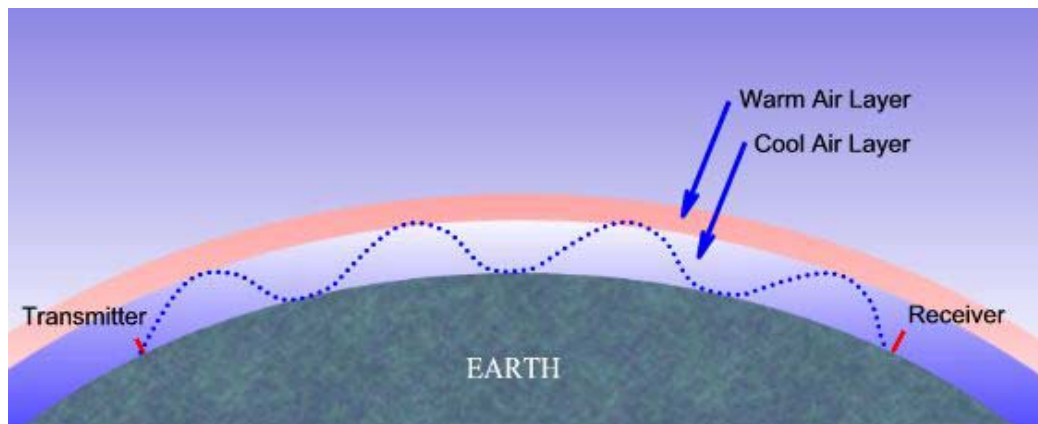
“A FREE RIDE TO SAN DIEGO”

By Alex Marko, KD6LPA

These days, few things are free. But every once in a while, mother nature gives us the gift of “Tropospheric Ducting” -- a weather condition that helps VHF radio waves travel farther than usual. Last week, I was scanning the 2 meter band and stumbled across a repeater I hadn't heard before. I looked up the frequency on the internet and was astonished to discover the repeater was located in San Diego! Turned out the QSO in progress was between a ham in Malibu talking on his HT to a contact in San Diego. After he was done, I decided to give it a try, and had a great QSO to San Diego with amazing audio quality. It was like I was talking to somebody here in Torrance!

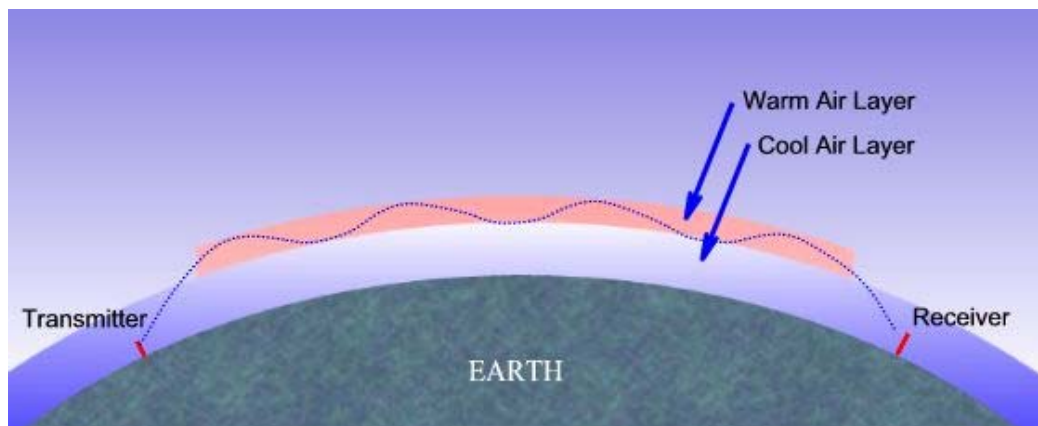
So what exactly is Tropospheric Ducting and how does it enhance the normal distance of radio waves?

Essentially, a layer of warm air forms on top of a bank of cold air, creating an “inversion layer”. When the radio wave encounters the warm air, the strong difference in temperature actually bends the trajectory of the radio wave back towards the earth.



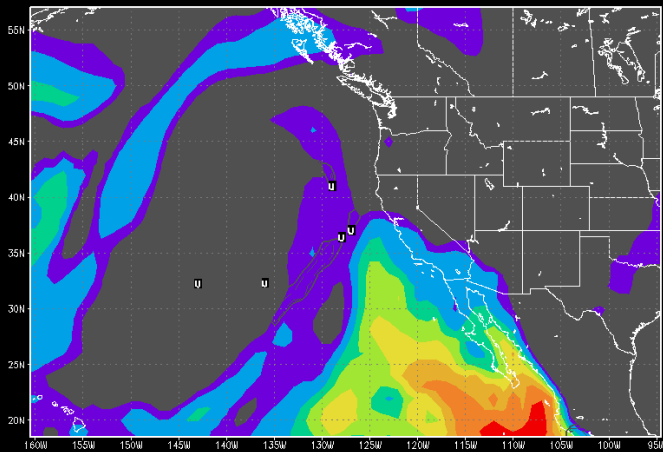
Much like the old pong game “Break Out”, the radio wave bounces back and forth several times between the inversion layer and the surface of the earth, enabling it to travel fantastic distances! Depending on the length and strength of the inversion layer, you can talk several hundred miles away, or thousands of miles away, even Hawaii when the conditions are right!

Another type of ducting, although more rare, causes the radio wave to get trapped inside a layer of warm air. In this example, it's easy to visualize the “duct” or atmospheric corridor that carries the radio wave long distances, and eventually delivers the signal back to earth miles away.



Tropospheric Ducting is a great way to get more mileage out of your 2 meter rig. It really adds a new dimension to VHF radio.

Hepburn Tropo Index Valid 1200 UTC Fri Feb 20 Wrn No America
COPYRIGHT 2009 WILLIAM R HEPBURN www.dxinfocentre.com



So how do you know when the air in the Troposphere is in the mood for picking up VHF hitch hikers? Well, it turns out there are some great internet resources out there that give you visual pictures showing the “sweet spots” for propagation. The hotter the color, the more intense the inversion, and the more ducting is likely to occur. The map posted to the left came from the following web site: http://www.dxinfocentre.com/tropo_wam.html.

If you'd like to read more about Tropospheric Ducting, I highly recommend you take a look at the <http://www.dxfm.com/> web site, and then select “Signal Propagation” on the left hand side. It's quite informative and well written. I certainly learned a lot from the articles posted, so take a look -- definitely worth the read!

Until next time, this is Alex saying 73. Look forward to seeing you at the next club meeting, Thursday, Feb 19th @7:30pm.

440 Band Power Restriction by Rich Whited, KG6JKJ

Did any of you know that ham operators in most of California are restricted to 50 watts Peak Envelope Power (PEP) when using the 440 band? I certainly did not. I'm sure that many of you do remember that we share the 440 band as secondary users with the military being the primary. It turns out that for that very reason, hams in 11 states are being held to a 50 watt power restriction. The link to this information is: <http://www.fcc.gov/oet/info/maps/us7/>. The Air Force uses frequencies within the amateur 440 band for radar and other undisclosed applications. According to 47 CFR 2.106 Footnote US7 "In the band 420-450 MHz and within the following areas, the peak envelope power shall not exceed 50 watts, unless expressly authorized by the Commission after mutual agreement, on a case-by-case basis, between the Federal Communications Commission Engineer in Charge at the applicable district office and the military area frequency coordinator at the applicable military base." The webpage goes on to show a US map with areas that are under the power restriction and contains specific information about those boundaries.

What does the above mean and how does it affect us? For those of you who use beams on 440 but don't use a radio or amplifier that puts out more than 50 watts, worry not. It means that you can not exceed 50 watts from the transmitter and/or any attached amplifier. That being said, because we amateurs are "secondary" users, we have the potential to interfere with military (particularly Air Force) radio and radar systems. A prime example of this is the situation involving amateur 440 repeaters near Beale Air Force Base in central California and Otis Air Force Base in Massachusetts. Repeater owners in those areas have had to reduce the power on their repeaters (down to or below 50 watts depending on proximity) to reduce or eliminate interference with the PAVE/PAWS radar installations at those bases. You can actually hear military 440 radar when you scan the band using a sideband capable radio which sounds like a buzz that fades up then down.

So, why is most of California covered in the power restriction? The military uses a variety of communications and control systems for aircraft and missile testing in the airspace above most of the state. Interference could cause all kinds of havoc with these systems. I know that I would not like to have the interference traced back to me after something malfunctioned and crashed or unexpectedly launched when I keyed up my 440 radio and amplifier. I realize that as far as I can find, all of the so-called "all mode" radios available that are 440 capable will put out 50 watts or less, but I have heard contesters during the VHF/UHF contest using readily available 440 amplifiers. Please remember, as secondary users, we are obligated to the primary user (the military) to have as little of an impact as possible on their usage of the 440 spectrum.

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

Alex, KD6LPA
Alex, KD6LPA
Rich, KG6JKJ
Matt, N6MDC
Nancy, NJ6S

President
Editor / Webmaster
Vice President
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. (Contacts: Page 4)

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



A big thank you goes out to Chuck-KN6H for delivering the eulogy at Loyd's-N6GDH funeral on December 11th, 2008 at Green Hills Memorial Chapel on behalf of the SBARC. Chuck did a wonderful job conveying the heartfelt feelings we had for Loyd at the service, and delivered the eulogy in the finest tradition possible. This did not escape the family's notice, as they thanked him in a special note of appreciation.

Reminder: The SBARC W6SBA Thursday night net is in full operation again. Remember the net is on every 1st, 2nd, 4th and sometimes even an 5th Thursday of each month. The holiday season made it kind of hard to do at times, but now that we're well into 2009, please remember to hop on the weekly net @7:30pm Thursday evenings, and chat with your fellow hams.

Dues: Please remember to submit your annual dues for 2009. We need your continued financial support to keep the club running smoothly. Dues for a single member is \$20 dollars, Associate and family memberships are \$30 dollars. Please make your check payable to SBARC and drop it in the mail to:

SBARC Membership
 P.O. Box 536
 Torrance, CA 90508-0536

Memberships Received So Far:

Ray-WA6OWM	551354	Bill-KQ6Z	551355
Cliff-K6LH	551356	Mark-KA6ZTO	551357
Gary-KE6KG	551358	Craig-WD6AKX	551359
Daryll-W6JII	551360	Melody-KI6SPA	551361
Robert-KI6MNK	551362	Barbara-KI6STY	551363
Jerry-KI6RRD	551364	Jeremy-KI6SUA	551365
Ken-K6HRN	551366	Roy-K6ARB	551367
Nancy-NJ6S	551368	Bill-N6ES	551369
Paul-KK6BY	551370	Matthew-N6MDC	551371
Alex-KD6LPA	551372	Gary-WD9DUI	551373
Brian-KI6ERR	551374	Harlan-KC6YBJ	551375
Alan-KG6ZPL	551376	Donna Wilson	551377
John-AE6LK	551378	Clyde-WB6HLS	551379
Joe-WB6MYD	551380	John-KI6IMP	551381

Congratulations to Joe Pace-NZ6L on being elected President of the PVARC. We're very happy for you! The PVARC is another great club in the area, and we wish Joe all the best in his new position.

Baker to Vegas: You still have the opportunity to join us this year at Stage 13 for this all important Law Enforcement Relay Race across the desert. It's a little earlier this year, March 14 -15, 2009 and will likely be cooler, but will still be a lot of fun.

Swap meet Chair person: Alan Parks -- KG6ZPL volunteered to help out with the swap meet. We'd still like one - two more volunteers so we can create a rotating schedule throughout the year. If you can help, please contact Joe, WB6MYD.

CLUB OFFICERS FOR 2009:

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

Council Member #1, Matthew Cruse - N6MDC
310-374-5696

Vice-President: Richard Whited - KG6JKJ
rbwhited@yahoo.com - 562-756-7103

Council Member #2, Nancy Klatskin - NJ6S
nklatskin@sprynet.com - 310-540-3253

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

Past-President, Ed Hinz - KN6JN
kn6jn@aol.com - 310-325-7944

Hams can help NASA Nancy Klatskin NJ6S

NASA might need our help. NASA's two STEREO spacecraft will be 180 degrees apart and will image the entire Sun for the first time in history in February, 2011. Would you like to be involved in this historic mission?

Chris St. Cyr of the Goddard Space Flight Center says that experienced ham radio operators can participate in the historic STEREO mission to see the far side of the sun by helping NASA capture STEREO's images.

The following is from the January 23, 2009 press release - NASA Sees the 'Dark Side' of the Sun – at:
<http://science.nasa.gov/headlines/y2...htm?list157891>

The busy Deep Space Network downloads data from STEREO only three hours a day. That's plenty of time to capture all of the previous day's data, but NASA would like to monitor the transmissions around the clock.

"So we're putting together a 'Mini-Deep Space Network' to stay in constant contact with STEREO," says Bill Thompson, director of the STEREO Science Center at Goddard.

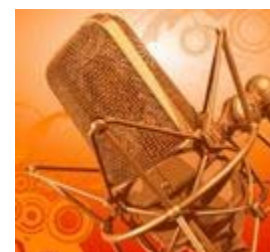
The two spacecraft beam their data back to Earth via an X-band radio beacon. Anyone with a 10-meter dish antenna and a suitable receiver can pick up the signals. The data rate is low, 500 bits per second, and it takes 3 to 5 minutes to download a complete image.

So far, the mini-Network includes stations in the United Kingdom, France and Japan—and Thompson is looking for more:

"NASA encourages people with X-band antennas to contact the STEREO team. We would gladly work with them and figure out how they can join our network."

A new Free Ham Radio Podcast for Ham's by Hams's

<http://www.icqpodcast.com>



Dear Fellow Amateur,

I hope you won't mind me contacting you, however I wanted to tell you about a new free Podcast (broadcast), by amateur operators for amateur operators—The ICQ Amateur / Ham Radio Podcast.

If you don't know what a Podcast is, it's an audio file which has been compressed into MP3 digital format. These files can then be played on a MP3 Player, a computer, or some CD players that can read this format direct from a disc.

My son Colin and I have decided to record a fortnightly Amateur Radio Podcast called ICQ Podcast. The aim of the podcast is to help new entrants to the hobby like Colin to learn and understand the technical detail to attain their licence, while providing experienced operators with a combination of news, reviews, opinions, upcoming events, features and reports. The podcast is recorded for amateurs and including amateurs.

Previous episodes have covered topics including operating on holiday in Cyprus, an introduction to building an 80m SSB Kit and microphone modifications and new product re-views. We have also hosted roundtable discussions reviewing 2008 for Ham radio and a new-bie roundtable discussing their enjoyment of their new hobby. We are looking for other con-tributors to become involved. If you are interested, please e-mail info@icqpodcast.com

If you would like to find out more please visit our website at <http://www.icqpodcast.com> or search iTunes for "icqpodcast", or add to iTunes - <http://phobos.apple.com/WebObjects/MZStore.woa/wa/viewPodcast?id=284922000> and download an episode or two.

Thank you for your time, Martin Butler

LOTW REACHES NEW MILESTONE: 200 MILLION QSOS

On January 16, Vic Kean Jr, K1LT, of Carroll, Ohio, uploaded four years' worth of logs -- about 25,000 QSOs -- to ARRL's Logbook of The World (LoTW) <<http://www.arrl.org/lotw>>. Somewhere in that batch, the LoTW counter crossed the 2 million mark. To celebrate Kean's submission of the 200 millionth QSO, the ARRL has awarded him lifetime free LoTW credits and free ARRL Awards as he qualifies for them.

"When I uploaded all of my contest logs since moving to my current location," Kean said, "I was really surprised at the number of the contacts that were immediately confirmed -- about 30 percent -- especially DXpeditions. I've been very laggard about responding to QSLs that I get. The last batch I did was by printing some card stock on a laser printer."

Kean, who mainly enjoys operating CW on 160 meters, said that he enjoys what he calls "success at contesting through technological superiority," as opposed to superior operating ability. "In other words," he said, "I work at improving my station with technology, and then test those improvements in a contest. I attempt to achieve awards by trying to get into one of the 'Top 10 boxes' in the contest results. Somewhere I have a Worked All States certificate from my youthful days. I worked about 160 countries but never got around to submitting any cards for DXCC." Kean said that he still intends to try and get at least one QSL card from every country.

"Even though we knew that Logbook of The World would explode in its popularity, 201 million QSOs in roughly the first five years of its existence show that LoTW's concept and ideas have worked beyond our expectations," said ARRL Membership and Volunteer Programs Department Manager Dave Patton, NN1N. "Vic's log contributes not only to the bottom line, but to the overall embrace of the technology and further bolsters our commitment to continue to improve and expand the system."

Kean said that he believes Amateur Radio will certainly continue to change as time goes on, "but I don't expect the hobby to ever completely go away. With cognitive radio coming, there is plenty of opportunity to experiment, even by just writing software. In the long run, I think the rules of spectrum allocation will change, but hopefully the change will benefit people in general, rather than corporations. If so, there will still be a role for communications experimenters. Man versus the ionosphere will still be interesting, no matter what the spectrum rules are."

When asked if he would encourage other hams to try Logbook of The World, Kean was enthusiastic: "If someone asked me about Logbook, I would tell them, 'Don't worry about it. Logbook of The World works, and it seems to be enjoying much greater popularity than you know.' At least, that's what I just found out!"

From: The ARRL Letter, Vol. 28, No 3 1/23/09

NEW ARRL PUBLICATIONS AVAILABLE FOR PURCHASE:

Basic Antennas - NEW

An introduction to antennas--basic concepts, practical designs, and easy-to-build antennas!
Only \$29.95

The ARRL Satellite Handbook - NEW

First Edition. Explore, track and operate ham radio satellites!
Only \$24.95

50 Years of Amateur Radio Innovation: Transmitters, Receivers and Transceivers - NEW

This guided tour of more than 400 legendary radios from 1930 to 1980, depicts the "golden age" of American radio technology.
Only \$39.95 (hardcover)

The Secret Wireless War - NEW SOFTCOVER EDITION

The Story of MI6 Communications--1939-1945 (World War II)
An extraordinary story that includes hams among those patriots that undoubtedly helped the allied war effort.
Only \$39.95

MICHAEL J. COPPS NAMED ACTING FCC CHAIRMAN

On Thursday, January 22, President Barack Obama named current FCC Commissioner Michael Copps as Acting Chairman of the Commission. Rumors circulated in mid-January that technology executive Julius Genachowski would be nominated as Chairman. Copps will serve as Acting Chairman until a new Commissioner/Chairman is confirmed.

"I am honored to be designated as Acting Chairman of the FCC," Copps said in a statement released by the FCC. "I thank President Obama for his confidence in me and for this opportunity to serve. I know that I have a truly gifted and terrific team to work with. I pledge every effort I am capable of to help steer the Commission through its current transition to new leadership."

ARRL Chief Executive Officer David Sumner, K1ZZ, congratulated Copps on his appointment. "Whenever we have sought a meeting with him or his staff, his door has always been open to us," he said.

Currently serving a second term as FCC Commissioner, Copps began his first term with the Commission in 2001. Before his appointment to the FCC, he served as Assistant Secretary of Commerce for Trade Development at the US Department of Commerce, where he was previously Deputy Assistant Secretary of Commerce for Basic Industries. Copps came to Washington in 1970, joining the staff of Senator Ernest Hollings (D-SC) and served for more than a decade as his Chief of Staff. He has also held positions at a Fortune 500 company and at a major trade association. Before coming to Washington, Copps was a professor of American history at Loyola University of the South. He received a BA from Wofford College and earned a PhD from the University of North Carolina at Chapel Hill.

Upon being sworn in for his second term as FCC Commissioner in 2006, Copps said that "The last four and a half years have been tremendously transformative for the world of telecommunications and the media. The future holds even greater challenge. I look forward to continuing to work with my colleagues on the Commission, with the Congress and with all the other stakeholders to help bring the most advanced, accessible and cost-effective communications system in the world to all American consumers."

ETP GRANTS

ETP grants consist of Amateur Radio equipment, enabling the school to set up a station. Schools may receive activity kits in addition to station equipment. The following schools recently received ETP grants:

Phillip Magruder Middle School, **Torrance, California**: This grant application proposed an after school program based on three pillars: To instruct students on the basics of radio technology and allow them to practice using the technology to communicate effectively; to allow students to construct a radio station and take licensing classes to be able to use their station, and to use the context of the club (ham radio) to explore careers through related field trips and interaction with hams in the community. The proposal is well thought out and presented and it represents a program that has good potential for success.

SOLAR UPDATE

Tad "Sitting around a secret sea, worship a secret Sun" Cook, K7RA, this week reports: On Tuesday, January 27, we saw another one of those "almost-a-sunspot" emerge in the Sun's low latitude, so it was probably an old Solar Cycle 23 spot; it was gone the next day. Sunspot numbers for January 22-28 were 0, 0, 0, 0, 0, 0 and 0 with a mean of 0. The 10.7 cm flux was 69, 70, 68.8, 69.8, 69.9, 69.7 and 69.5 with a mean of 69.5. The estimated planetary A indices were 1, 1, 1, 1, 10, 4 and 2 with a mean of 2.9. The estimated mid-latitude A indices were 0, 1, 1, 1, 9, 2 and 1 with a mean of 2.1. For more information concerning radio propagation, visit the ARRL Technical Information Service Propagation page <<http://www.arrl.org/tis/info/propagation.html>>. To read this week's Solar Report in its entirety, check out the W1AW Propagation Bulletin page <<http://www.arrl.org/w1aw/prop/>>. This week's "Tad Cookism" brought to you by G. K. Chesterton's "The Ballad of the White Horse" <http://en.wikiquote.org/wiki/The_Ballad_of_the_White_Horse>.

W1AW to QSY on 160 Meters

Starting Monday, March 9, Maxim Memorial Station W1AW will be using a new 160-meter frequency for its CW transmissions. To accommodate increasing activity near the current bulletin frequency of 1817.5 kHz, W1AW will move to 1802.5 kHz to reduce the possibility of interference.

CALENDAR

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

Club Meeting - 3rd Thursday of the month
February 19, 2009 7:30 p.m.
Torrance Memorial Medical Center
West Tower, 2nd Floor, Room "B"

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, February 28, 2009
7:00 a.m. - 11:00 a.m.

VE Session - February 14, 2009
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, February 14, 2009, 12pm
Billy's Deli
5160 W. 190th Street, Torrance CA

CLUB SERVICES

Awards Manager (HF/VHF)	Cliff - K6LH
Health & Welfare	Matthew - N6MDC
Swap Meet Chair	Joe - WB6MYD
VE Test Liaison	Joe - WB6MYD
VE Test Sessions	Joe - WB6MYD
Webmaster	Alex - KD6LPA
Editor	Alex - KD6LPA
Proofreader	Nancy - NJ6S

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

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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

