



July 2015

ARCOver

A Community Service Organization Dedicated to Amateur Radio Since 1970

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As we celebrate
our nation's freedom,
we honor
the courageous
men and women
dedicated to
preserving it.

Happy Independence Day

E-mail: W6SBA@arrl.net



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

Hello all!

I would first like to thank Bruce and Alex for their help in giving our June meeting. It is difficult to find speakers for eleven meetings per year and we need to give thanks to those who make our enjoyable meetings possible.

We had a successful Field Day. I first want to thank the Torrance Memorial Medical Center for hosting our event. I would like to thank all of you that made it possible with their hard work. In particular, I want to thank the folks who turned out on Friday and early on Saturday for set up and then stuck around until all of the equipment was taken down and re-stored at Joe's QTH. Particular thanks go to Joe, WB6MYD, for arranging all of the food. A super 'thank you' goes to Ed, KN6JN, and to his wife Blair and their friend Kathy for preparing a super breakfast for us on Sunday morning. We made about 200 QSO's and received most of the bonus points for which we tried. We successfully sent a message to our ARRL Section Manager and made our first Field Day satellite QSO. We have Tom, KI6RC, and Bruce, KJ6BJ, to thank for that as they arrived at the Field Day site at about 5:00 AM for the early morning satellite pass. Thanks also go to the operators who made the QSO's possible. The radios were busy for most of our operating hours. We also had visits from two Torrance Councilmen, a photographer from the hospital and from two news organizations including Channel 7 TV. We actually were on a television newscast which is great for us and for Ham radio in general.

Our club's next challenge is Hamcon. As you know, we have agreed to provide both the W1AW station and the talk-in stations for the event. This means that we will have to set-up the stations before the start of Hamcon, staff it during the event, and then take down the station afterwards. Thankfully, the setup process will be much simpler than that for Field Day as we will only be erecting two antennas. Hamcon is in September. I urge you to sign up soon as it is a fun event!

I need to insert some cautionary words here. Our club is turning into (or perhaps has turned into is more accurate) a geriatric society. That means we are getting OLD with all of the attendant physical ills. We are realizing that we cannot continue to erect four pushups with multiple antennas without endangering ourselves. We are either going to have to scale back our equipment setup or enlist some more youthful help for both setup and take down. We will be giving considerable thought to this over the coming year. We have had proposals ranging from holding Field Day in a park and making it a one day operation to purchasing some easier to erect antennas such as a vertical and using that in conjunction with our Buiddipole for our HF work. We could also put the VHF/UHF antennas on tripods. I'm sure that we will come up with more solutions over the coming year. This will certainly cut down on our overall capabilities but would possibly save our lives to transmit on another day!

I had one other important Field Day related thought. A few of us spent a lot of time and effort erecting antennas, setting up tables, and setting up all of the rest of the equipment required for a successful Field Day. At Joe's, we had five people, four of whom were over sixty years (three who were a lot over) of age putting away equipment until after 4:00 PM Sunday afternoon. We had eighteen club members sign in and maybe half of that number operated for more than a few minutes. So, a lot of effort was put in by relatively few people for a meagre turn out. So, I would like to put this question before the membership. Do you still want to have a Field Day? I know that many of our members that usually come to Field Day were not able to attend because of travel, medical and family events and others were not there because of the dreaded lack of interest. If you all don't want to do Field Day we can put our efforts into some other type of radio related activity that you can support. It's your club, so let us know what you want to do. This has just become too much effort to continue doing if the membership is not going to support the event. Well, that's it for this month. Excuse an old man for some grumbling but I really want this club to be successful.

Thanks and 73's,
Alan

CLUB OFFICERS FOR 2015

President

Alan Parks - KG6ZPL
thermic72@sbcglobal.net - 310-558-8718

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Vice-President

Bruce Jackson - KK6BJ
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Activities Council Member

Jerry Cook - KJ6JJ
jcookggca@aol.com - 714-898-3983

Past President

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



July 16th - 7:30 p.m.

**Torrance Memorial Med Center
West Tower, 2nd Floor, Room A**

Looking for a ham radio activity that everyone in the family can enjoy? Want an outdoor "techie" sport that will make the kids set aside Facebook and iPhones for a while? Find out how you, your family and your club can have fun with radio direction finding (RDF). There are lots of variations including mobile T-hunting, radio-orienteeing and foxoring. You may already have (or can easily make) all the equipment you need to get started. Keep at it and you might join the hams who have won medals at international championship foxhunts in recent years. As a bonus, you'll learn a skill that will help you rapidly find sources of radio interference.



This month's guest speaker is Joe Moell, K0OV. Joe has written for almost every ham radio publication and designed many new devices for radio direction finding (RDF). His book "TRANSMITTER HUNTING---Radio Direction Finding Simplified," is the definitive text on RDF for hams, and he has written over 250 magazine articles on RDF topics. In addition to being a Technical Adviser on RDF to ARRL Headquarters, he serves as ARRL's ARDF Coordinator and oversees the yearly USA ARDF Championships. He also moderates the annual CQ Worldwide Foxhunting Weekend. For more information on transmitter hunting, visit Joe's "Homing In" site on the World Wide Web: <http://www.homingin.com>

Quiz! COLUMN

BY ALAN, KG6ZPL

- 1) If 6 people can make 40 widgets in 6 hours, how many can 3 people make in 12 hours?
- 2) I had 20 dollars but all but \$6 was stolen. How much did I have left?
- 3) What is the next number in this sequence: 2, 5, 5, 4, 5, 6, 3, ?
- 4) How many outs are there in a baseball inning?

Answers to June's Quiz

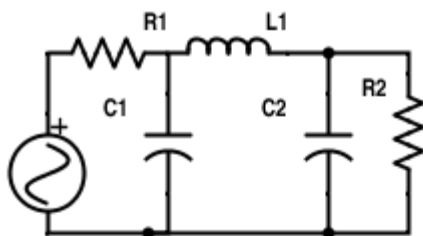
- 1) At midnight and at noon, the two hands of a clock are together. Between these times, how many times does the long hand pass the short hand of the clock? **Eleven times. The hands do not pass between midnight and 1:00 AM.**
- 2) How many integers between 0 and 500 are not exactly divisible by 3? **First think about how many are divisible by three. They are 3, 6, 9, ... 498 and so there are $498 / 3 = 166$ of them. There are 499 integers between 0 and 500. So we have $499 - 166 = 333$ that are not divisible by 3.**
- 3) Suppose you have a strainer whose dimensions are 5 inches by 2 inches by 4 inches. How much water can it hold? **None, since strainers don't hold water.**
- 4) Two runners start at the same spot. Each runs for two miles and then takes a right turn. They then each run a further three miles. How far apart are they when they stop? **Suppose they start out running East and West. The runner moving to the East turns North when she turns while the runner moving West turns South. So, when they stop, each is at the diagonal corner of a rectangle having one dimension of four miles and the other of six miles. We apply the Pythagorean Theorem to find the length D of the diagonal. $D = \sqrt{4^2 + 6^2} = \sqrt{16 + 36} = \sqrt{52} = 7.21$ (to two decimal places) 66. Each person at the party shakes hands with 11 other people, This results in 11×12 handshakes. But each handshake is counted twice as two people shake hands, so we must divide by 2. This yields 66 distinct handshakes.**
- 5) What device for telling time has the most moving parts? **An hour glass.**

Please send answers, questions or comments to Alan at thermic72@sbeglobal.net

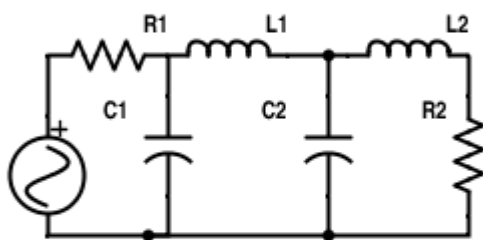
RF FILTERS: PART 5

Last month we discussed some simple order 1 (one energy storing device) low and high pass filters. This month we will look at some higher order filters. Remember that, generally speaking, the higher the order of the filter, the steeper the filter's skirts. So, why do we want steeper skirts? This is because the less steep the skirt, the more of the unwanted signal "leaks" through. I should also note that a vertical "brick wall" filter is technically impossible to achieve but we can come close.

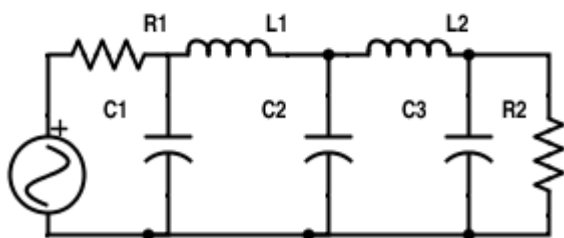
The filters shown below are of order 3, 4, and 5 and represent filters of the Butterworth or Chebyshev types. They are capacitor input filters because the first energy storing element the signal encounters is a capacitor.



Capacitive input filter of order 3



Capacitive input filter of order 4



Capacitive input filter of order 5

(RF Filters continued on page 5)

FCC CHAIRMAN, LAWMAKERS AGREE TO SCALE BACK FIELD OFFICE SHUTDOWNS

Leaders of the US House Energy and Commerce Committee have reached agreement with FCC Chairman Tom Wheeler to amend the Commission's plans -- announced in March -- to close a number of FCC field offices. Under the revised plan, the FCC will keep 15 of its 24 field offices open. According to a Committee media release, the plan would "ensure better rapid response capabilities for the West, provide a mechanism for escalating interference complaints, improve enforcement of the FCC's rules against pirate radio operators, and prevent the Commission from transferring field office jobs to FCC Headquarters." The FCC had been under pressure from lawmakers and others to step back from its plan to shutter the field offices.

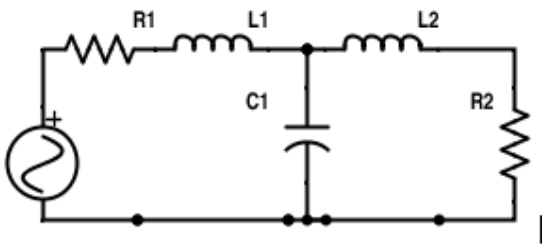


"We found a good solution that makes sense. These changes will keep field offices open in strategic locations and help ensure that the commission can fulfill its responsibilities to the public and public safety communities," said Communications and Technology Subcommittee Chairman Greg Walden, W7EQI. "This agreement strikes a balance between the important work of FCC field agents and streamlining field operations to ensure the efficient use of taxpayer dollars. Positive outcomes often result from collaborative work. This agreement represents just such an effort." The closure plans were revealed earlier this year via an apparently leaked internal FCC Enforcement Bureau (EB) memorandum that indicated the Bureau planned to ask the full Commission to cut two-thirds of its field offices and eliminate nearly one-half of its field agents. At the same time, the Bureau would develop a so-called "Tiger Team" of field agents as a flexible strike force it could deploy as needed.

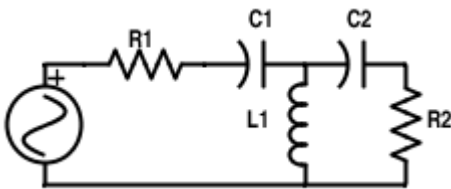
ARRL Letter, June 18, 2015

RF FILTERS: PART 5 CON'T.

So, are these high-pass or low-pass filters? We can easily figure this out by looking at the schematics. First remember that inductors pass low frequencies while capacitors pass high frequencies. We note that the load in all three cases is resistor 2 in series with the signal source. So, what gets to the load? The signal first encounters capacitor C1 which bypasses some of the high frequency content from the load. The signal then reaches inductor L1 which passes low frequency content. Next, capacitor C2 is reached which bypasses even more of the high frequency content. Successive inductors and capacitors work together to pass low frequencies and bypass high ones. So, these are low-pass filters. We can also have inductor input low-pass filters as is shown in the next figure which depicts a 3rd order low-pass filter with inductive input.



The capacitive and inductive input filters have identical characteristics for a given set of components but present different impedances (resistance) to the signal. The inductor input has high impedance in the pass band while the capacitive input filter presents low impedance. Of course these low-pass filters have high-pass counterparts. We will finish this month's installment with an example of an order 3 capacitive input high-pass filter. You should be able to figure out why the filter is high-pass.



Next month we will discuss some additional types of filters.

Send comments and questions to Alan at thermic72@sbcglobal.net

LETTERS TO MEMBERS OF CONGRESS OFFER BIGGEST BOOST TO AMATEUR RADIO PARITY ACT

ARRL President Kay Craigie, N3KN, has told Section Managers that, while promotion and positive publicity about the Amateur Radio Parity Act (H.R. 1301) are always helpful, the most useful action radio amateurs can take



is to contact their members of Congress, urging them to sign on as cosponsors. As of June 9, 72 members of the US House in both parties were listed as cosponsors of the proposed legislation, which would direct the FCC to extend its rules relating to reasonable accommodation of Amateur Service communications to private land-use restrictions. Craigie told the SMs that the grassroots campaign supporting H.R. 1301 needs more letters.

"We have been told quite bluntly by some congressional offices that they want letters from constituents -- that they will be interested in what the ARRL has to say only if they know that voters care about this issue," Craigie said in urging Section Managers to rally the troops. "Why should the congressman care, they ask, if the voters don't? There are tens of thousands of ARRL members who have not written yet. You can do a lot to persuade them to write, because they know you."

Members are encouraged to contact their member of Congress by writing personalized, signed letters on paper, based on the sample letter, available on the ARRL H.R. 1301 web page. Letters should go to ARRL Headquarters for hand delivery to the appropriate House members. Send letters to ARRL, ATTN H.R. 1301 Grassroots Campaign, 225 Main St, Newington CT 06111

From ARRL Letter, June 11, 2015

HAMCON2015

The ARRL 2015 Southwestern Division Convention returns to the Los Angeles area and explores Amateur Radio's second century.

September 11-13, 2015

Free Morse Mouse App an Educational Tool for Newcomers



Chelmsford, England, radio amateur Charlie, M0PZT, has released *Morse Mouse*, an free app he developed to demonstrate Morse code to young people in the form of a game. He said the program, which runs in *Windows*, is aimed at aiding in the teaching of Morse code to youngsters -- and the young at heart. In

the game, the player has 5 to 10 seconds to type the letter being sent in Morse. The program offers three "lives" to guess correctly, and the letter is sent again if the player is incorrect. with a repeat sending of the character if guessed incorrectly. The object is to get the mouse closer to the cheese, which happens with each correct response. If the player is wrong, the mouse moves away from the cheese. The quicker the player is at correctly identifying what has been send, the higher the final score. While he makes a crib sheet available, "that's not to say that those comfortable with 15-20 WPM speeds won't get some fun out of this," he said. *Morse Mouse* debuted in March as part of British Science Week. It certainly unleashed visitors' competitive streaks, with people trying to better their scores," he said, adding that some visitors expressed surprise that Morse code is still used.

[ARRL Letter, June 11, 2015](#)

New World Distance Records Set on 2.3 and 3.4 GHz Ham Bands



N6NB's rover-type station at 8000 feet elevation on Mauna Loa, with Mauna Kea, the Big Island's other 13,000 foot mountain, in the background. [Photo courtesy of Wayne Overbeck, N6NB]

Two California radio amateurs -- one of them in Hawaii -- have set new world distance records on the 2.3 and 3.4 GHz microwave amateur bands. Wayne Overbeck, N6NB, operating from a radio-equipped rental car on the Big Island of Hawaii, worked Gregory Campbell, W6IT, operating from Overbeck's own fixed station near Orange, California, on both bands -- a distance of more than 4024 km (2495 miles). The contacts blew away records that had stood for more than 20 years, and more than doubled the previous distance records for a two-way voice (SSB) contact at those frequencies, Overbeck said, adding that most previous microwave distance records have been set using CW.

"Ours was the first-ever SSB contact between Hawaii and the mainland on 2304," Overbeck noted. He said Chip Angle, N6CA, and KH6HME (SK) made the first trans-pacific SSB contact on 3.4 GHz in the 1990s.

[ARRL Letter, June 2015](#)



News From

Joe

1. **Attendance drawing:** The winner for our Attendance drawing at our June 18, 2015 meeting was Robert-N6QA. Unfortunately Robert was not in our midst and therefore did not collect the \$ 20.00 kitty. The kitty therefore for our July 16th meeting will be 25 dollars. Please remember you must be a member in good standing and be present for you to collect it. That is its purpose, we wish to encourage all our members to attend at our regular monthly meeting.

2. **Thank you:** The June meeting was devoted to the upcoming 2015 Field Day event. Alan-KG6ZPL started the meeting with a brief history on the field day contest. Yes it was found after the few first few field day's that hams turn everything into a contest. Result, well much more participation. This was followed by Alex-KD6LPA with a basic run down on the program being used to do all the logging. Thank goodness for computers because as always a log is a very important part of any contest or activity. Computers do all the hard work and log every contact made. Guess what you would have to do if no computer was available? Let me tell you no fun if you have a few hundred contacts and impossible if you have more since all this has be checked etc etc. Bruce-KK6BJ showed the logistics and operational features of our radio's which would be available for FD. We wish to thank all 3 of our members for a job well done and if I forgot anyone (please let me know) we wish also to thank you. A lot of work went into this not just the above 3 but some other members made preparations and such vital to a successful event. So thank you one and all.

3. **New email address:** You heard about me getting an different provider which resulted in a different email address. That by itself is not too bad, what's worse is the doubt you have that you haven't dropped all your contacts. So I want to appeal to your senses and let me know if you fail to receive any email notices from me. I am going to give my new email address which is jmlanphen@gmail.com. phone number 310-328-0817H . So please let me know if you're not getting my notices. Talk to your SBARC friends and ask them whether they are getting my notices. Please let us work together on this so we can all stay informed.

4. **Hamcon 2015:** As you know the ARRL SW Div Convention for 2015 will be held at the Torrance Marriott Hotel in September of 2015. The Early bird registration which saves you 5 dollars but ends July 31, 2015. It will cost you 27 dollars on August 1st till convention time. If you want to see anything in the exhibit halls or wish to attend luncheon and or dinner you need to be registered. Please go to our website and download the Registration form including all the other things for this great convention. I just got word that the top price Kenwood TS-590SC is the price for all registrants since it now has been offered by Kenwood. Speaker for the banquet has now also been confirmed including the MC. A lot of progress is now being made by a lot of hard work by a bunch of people. Of course the SBARC is still responsible for the W1AW/6 HF station as well as the Talk In station. All this information is available not only on www.w6sba.org but also www.hamconinc.org/ for the latest information as time is now getting closer to the September 11-13, 2015 dates.

(continued on page 7)

5. **FD Thank you:** As always I want to thank everyone for all the hard work, dedication and participation for our 2015 Field Day event for this year's annual activity. I'll have you know that this may have been the first year that we had all our stations on line and operating at 1100 AM on Saturday June 27th. Thanks to a lot of hard work a lot of people making it possible and setting up a lot of the hard stuff on Friday afternoon and evening. In order for you to realize you really have to participate in process in setting things up. Joe-WB6MYD started Monday June 22nd checking things and setting them for easy loading. Friday afternoon Chuck-K6SCH brought over the VAN rented from U Haul to transport everything. Unaware of the length of items to be transported rented the van had an safety partition between the driver and cargo compartments. This had to be removed to accommodate the pushups etc. Loading of all the stuff needed was completed earlier since Joe had it all set up and allowed us to start the assembly process on the top of the West Tower parking Structure. When it was all said and done all the antenna's were up including the di pole antenna's except for the UHF and VHF antenna's since Joe had forgotten to set those aside. Saturday morning we soon were able to collect the chairs and tables needed for the stations thanks to Tom-KI6RC and Russell-KI6HBG. Other helped to as 50 chairs and 20 table are no easy task to load. Ken-K6HRN was also very helpful and others as well. Joe discovered early that the outlet for coffee was not available and started up his own generator to provide power for the coffee pot. Alan KG6ZPL had picked up the little snacks for the hard working crews all around. The 2 other generators were set up and thanks to Jerry-KJ6JJ the computer network was set up for the various stations. Power was provide and radio's were set up and connected to coax prepared them for operation at 1100AM. Lunch was provided for everyone that had paid, subway sandwiches followed by 3 large pizza's for dinner. Since not enough operators were around after 10:00pm things were shut down and equipment secured. A good night's rest was important as well. 5:00am on Sunday saw the crew back up to make satellite contacts by Tom-KI6RC, Joe made coffee, generators were refilled and things were ready to go till 11:00am when we shut down again. Breakfast by ED-KN6JN, XYL Blair and Friend Kathy provided a great breakfast with pancake and omelets gave us all enough substance to start the breakdown after 11:00am. All stuff was loaded up again and after working the logistics regarding the ride sharing were worked out taken back to Joe's place for storage. I wish to thank all of you having worked hard to make this another successful Field Day for the SBARC. Well more participation was expected we made do and had some fun with it. If I forgot anyone please let me know, I too am getting on and while still having lifting restrictions helped out as much as I could. The team work from those of us worked hard to make it all possible thank you. Jerry is still working on the contact count for the entire event. 7 contacts were made using alternate power, publicity was the best thanks to Bruce-KK6BJ, Satellite contact by Tom-KI6RC, the cooperation from the hospital was fantastic,

including the security in blocking all traffic to the 5th and 6th levels of the West Parking structure. We had a safe Field Day and I hope for those of you having never worked Field Day had fun and learned valuable info on the process of establishing emergency communications under simulated emergency conditions. Thank you. Joe-WB6MYD

6. **WAM Contest:** As you know we had our annual WAM contest as suggested by Jerry-KJ6JJ June 13 and 14th. If you have not turned in your log to Jerry please do so ASAP. While not as many members participated in this year it was very successful in that Jerry especially was able to work several different ways in making contacts. That was the purpose of the contest so you could participate not only in our local contest but also the National VHF/UHF contest which was that weekend as well. Yes we know we've never really have been very successful in this VHF/UHF contest but it is a big national contest and we had hoped that some participation would stimulate interest to do better next year. Anyway, please get your log into Jerry for his count in contacts made either locally or more.

7. **Picnic:** Yes, plans are under way for a picnic at De Portola Park in Torrance on July 18th. More details to follow on this as soon as they become available. We just want to have an social more or less and talk about field day as well as all your concerns and more. You know Hot dog and maybe a little hamburger always go a long way making things enjoyable. Stay tuned for more info on this via email and at the meeting.

8. **Hamcon:** As mentioned earlier, early bird registration will end July 31st saving 5 dollars. Registration cost is 22 dollars but will be 27 dollars starting August 1, 2015. If enough SBARC members wish to be seated on one table during the banquet please be sure to let us know that you are ordering dinner as it is possible on the registration form so arrangements may be made to reserve a table for us. It has now been confirmed that the main banquet speaker is confirmed including the MC for that portion of the convention. The big prize is, an very expensive HF transceiver TS-590SG, as the Registration grand prize with an Kenwood TM-710G VHF/UHF mobile radio with GPS/APRS as Pre-Registration price. Numerous other prizes will be throughout the convention announced as always (too many to mention here). Furthermore, from the vendor list it looks as though we should an array of new equipment being shown and a rather number for interesting things. A meeting is scheduled by the Hamcon meeting for Saturday July 18th at the Marriott here in Torrance. Please register early.

Joe

Thursday Night Net
@ 7:30 p.m.



Please join us on W6SBA 224.38 minus offset and the PLat 198.2 hz you can share your experiences or just say hello!

CALENDAR

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

Club Meeting - 3rd Thursday of the month
July 16, 2015 - 7:30 p.m.
Torrance Memorial Med 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,
July 25, 2015 , 7-11 a.m.

VE Session - Contact: Joe WB6MYD
Phone: (310) 328-0817
jmlanphen@gmail.com or w6sba@arrl.net

Social Event - Contact: Joe WB6MYD
Phone: (310) 328-0817
jmlanphen@gmail.com or w6sba@arrl.net

CLUB SERVICES

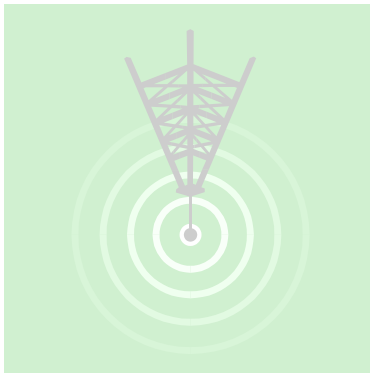
Awards Manager (HF/VHF)	Cliff - K6LH
Health & Welfare	Joe - WB6MYD
Swap Meet Chair	Joe - WB6MYD
VE Test Liaison	Joe - WB6MYD
VE Test Sessions	Joe - WB6MYD
Webmaster	Scott - N6LEM
Editor	Glenda - KF6QFE Glenda.simpson@hotmail.com
Proofreader	Alan - KG6ZPL

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

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Post Office Box 536
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