



June 2015

ARCO *ver*

A Community Service Organization Dedicated to Amateur Radio Since 1970

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June 27th - 28th

Join the Fun!!



ARRL Field Day

ARRL Field Day is the most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June, more than 35,000 radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.



E-mail: W6SBA@arrl.net



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

Hi everyone:

It's June and that means Field Day. But, before I get into that, I'd like to thank everyone who helped out on the Torrance Armed Forces Day Parade. In particular, I'd like to thank Joe, WB6MYD, for taking the lead on the project. We had a fine turnout with nine volunteers showing up for the parade with several first timers who all enjoyed themselves. As an ARRL Special Service Club, it is important that we support events like this, so thanks again to those who made it possible.

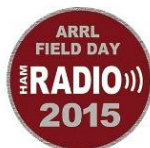
Next, congratulations to our vice-president, Bruce, KK6BJ, and Tom, KI6RC, for their successful balloon launch. Its payload's signal apparently blanketed most of the western states and Northern Mexico. Unfortunately, they did not recover the payload but it may still show up. They are already planning for balloon launch II which will incorporate a number of "lessons learned".

Field Day will be held from 11:00 AM on Saturday, June 27th, to 11:00 AM on Sunday, June 28th. However, we will need help for more than that for set up and take down. First, we need volunteers to show up at Joe's, WB6MYD, QTH at 2:00 PM on Friday, June 26th to load the van that the club is renting. All of the antennas, coax, and other supplies will need to be loaded. We will then go to the hospital to unload. More volunteers will be needed at the top of the West Parking Garage at TMH at 5:00 PM to help set up antennas. This activity will go on until dark. We will reconvene at 8:00 AM on Saturday to complete set up so that we can begin operating at 11. When Field Day is over we will need to dismantle all of the equipment, load it back into the van and unload it at Joe's. Please call Joe (310-212-7900 or 310-874-0382) for his address or email him at jmlanphen@gmail.com.

As usual we will be fed well. Three full meals will be provided: Lunch and dinner on Saturday and breakfast on Sunday. Lunch will be sandwiches from Subway, dinner is yet to be determined, and breakfast will again be provided by Ed Hinz, KN6JN. Any individual meal will be \$10 while all three meals are \$25. Of course pastries will be provided Saturday morning while drinks and snacks will be available anytime. NOTE: NO alcohol should be brought to Field Day. Please try to pay up early or at least e-mail Joe with your intentions so that we may get enough food to feed everyone. We also need several pick-up trucks to haul tables, chairs, and other equipment on both Saturday and Sunday. Please e-mail or call Joe if you can help out here.

June's meeting will be directed to Field Day. I will talk about Field Day's history, operating classes, and scoring. Alex, KD6LPA, will discuss our logging software, and Bruce, KK6BJ, will talk about the use of the club's radios. I hope to see you all at the next meeting and at Field Day!

Alan



CLUB OFFICERS FOR 2015

President

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

Vice-President

Bruce Jackson - KK6BJ

Secretary/Treasurer

Joe Lanphen - WB6MYD
jmlanphen@gmail.com or w6sba@arrrl.net
 310-328-0817

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chohn@socal.rr.com - 310-324-9561

Past President

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



June 18th - 7:00 p.m.

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

The June meeting of the SBARC will be devoted to Field Day. It will be presented as a collaborative effort by Alan, KG6ZPL, Alex, KD6LPA, and Bruce, kk6BJ. Alan will discuss the history of Field Day, the various classes such as 2A, and scoring. Alex will talk about our logging software and Bruce will discuss the care and feeding of our Yaesu FT-450 transceivers. Other Field Day issues will also be discussed. This is an important meeting in preparation for our Field Day effort so please plan to attend. We'll see you there!

Two Free Amateur Radio Courses

FCC "**Technician**" course (entry level)
FCC "**General**" course (2nd level)

Each course is 2 sessions

The sessions will be on 25 July & 1 August 2015

Technician 9:30 AM to 1:30 PM both Saturdays (bring your lunch)

General 1:30 PM to 5:00 PM both Saturdays

The FCC tests will be 10:00 AM to noon on 8 August 2015

At the start of the 25 July Technician course, the Palos Verdes Amateur Radio Club will give a 30 minute presentation on how to get further involved with amateur radio.

The location is the Fred Hesse Community Park,
29301 Hawthorne Blvd., Rancho Palos Verdes.

Confirm your attendance to Walt, K1DFO at waltordway@juno.com

There is no fee for either course.
Taking the FCC test is \$15.

Optional Material (sold at cost)

Gordon West books with all the FCC test questions,
\$22 for the Technician and \$26 for the General
- Paper copy of my Power Point charts,
\$20 for the Technician and \$20 for the General -

For courses sponsored by the Palos Verdes Amateur Radio Club, students thru grade 12 who pass their examination at a PVARC VE test session will, upon application to the Club, be eligible for reimbursement up to a maximum of \$50 to cover the cost of materials and the examination fee.

Everyone who obtains their first ham radio license through a PVARC VE session, regardless of age, will receive a free membership in the Palos Verdes Amateur Radio Club for the remainder of the current calendar year.



- 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?
- 2) How many integers between 0 and 500 are not exactly 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?
- 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?

Answers to last month's quiz

- 1) In a race, you pass the runner in second place. What place are you in now? *You are now in second place.*
- 2) Alice has four sisters named Amy, Betty, Clarice, and Diana. What letter does the fifth sister's name begin with? *The names are in alphabetical order so the next name will begin with the letter "E".*
- 3) There are twelve people at a party and everyone shakes another person's hand. How many handshakes are there? *66; Each person at the party shakes hands with 11 other people, This results in 11 x 12 handshakes. But each handshake is counted twice as two people shake hands, so we must divide by 2. This yields 66 distinct handshakes.*
- 4) What device for telling time has the most moving parts? *An hour glass.*

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

FCC Is Eliminating Vanity Call Fee

The FCC is eliminating the regulatory fee to apply for an Amateur Radio vanity call sign. The change will not go into effect, however, until required congressional notice has been given. This will take at least 90 days. As the Commission explained in a Notice of Proposed Rulemaking, Report and Order, and Order (MD Docket 14-92 and others), released May 21, it's a matter of simple economics. "The Commission spends more resources on processing the regulatory fees and issuing refunds than the amount of the regulatory fee payment," the FCC said. "As our costs now exceed the regulatory fee, we are eliminating this regulatory fee category. The current vanity call sign regulatory fee is \$21.40, the highest in several years. The FCC reported there were 11,500 "payment units" in FY 2014 and estimated that it would collect nearly \$246,100. In its 2014 Notice of Proposed Rule Making (NPRM) regarding the assessment and collection of regulatory fees for FY 2014, the FCC had sought comment on eliminating several smaller regulatory fee categories, such as those for vanity call signs and GMRS. It concluded in the subsequent Report and Order (R&O) last summer, however, that it did not have "adequate support to determine whether the cost of recovery and burden on small entities outweighed the collected revenue or whether eliminating the fee would adversely affect the licensing process." The FCC said it would not issue refunds to licensees who paid the regulatory fee prior to its official elimination.

US Naval Academy CubeSat Launch to Include Next APRS Satellite

Sometime on or about May 20, the next US Naval Academy satellites and Brno University PSK31 transponders head into space from Cape Canaveral on an Atlas 5 launcher and into an approximately 50° orbit. The launch will include the Psat APRS satellite -- a pair of identical 1.5 U cubesats (A and B) -- as well as the BRICsat and USS Langley (Unix Space Server Langley) nanosatellites.



"Psat is a Naval Academy student satellite project named in honor of one of our graduates, Bradford Parkinson, of GPS fame, which contains an APRS transponder for relaying remote telemetry, sensor, and user data from remote users and Amateur Radio environmental experiments or other data sources back to Amateur Radio experimenters via a global network of Internet-linked ground stations," explained APRS developer Bob Bruninga, WB4APR. In addition to the data transponder, a secondary Brno University transponder will support multi-user PSK31 text messaging. The APRS downlink will be 145.825 MHz (1200 baud AX.25 APRS).

"We welcome radio amateurs worldwide to tune into the downlinks and either IGate packets into the global APRS-IS system or to e-mail me," Bruninga said. "After launch, the next several orbits will be over USA and Europe." Bruninga said Psat, including the PSK31 transponder, would not be available for use until all on-orbit checks are complete, a process he said could take "many, many days." He also requested reports on any PSK31 (FM) heard on 435.350 MHz (the PSK31 uplink is 28.120 MHz).

The PSK31 transponders on two US Naval Academy CubeSats are now operational, according to Bruninga. The CubeSats were successfully launched on May 20 from Cape Canaveral on an Atlas 5 launcher. The launch also included The Planetary Society's LightSail-1. ARRL Letter, May 14, 2015

Field Day 2015
June 27th - 28th



GOT GRIDS? JUNE VHF CONTEST IS JUST AHEAD

Summer is nearly here, and that means it's time for the ARRL June VHF contest, June 13-15! The SBARC is running an addendum to the contest which is described elsewhere. Participants in the US and Canada (and their possessions) work stations in as many different $2 \times 1^\circ$ Maidenhead grid squares as possible, using the bands above 50 MHz. Stations outside the US and Canada may only work stations in the US and Canada (and their possessions). Stations in KH0-9, KL7, KP1-KP5, CY9, and CY0 count as W/VE stations and may be worked by DX stations for contest credit.



The June VHF Contest occurs at the start of the summer sporadic E season, and in-

tense openings on 6 meters and even 2 meters are possible. It's a whole new world of propagation possibilities that also include tropospheric ducting, aurora, and even meteor scatter and moon bounce. With many HF transceivers on the market equipped for 6 meters and sometimes for other VHF/UHF bands, getting on the air for this event is easier than ever.

Several entry categories are available, including portable -- for those who enjoy operating low power from a portable power source and using portable antennas, and rover -- for mobile operators who enjoy traveling from one grid square to another to hand out contacts. There's even an FM-only category (50, 144, 222, and 446 MHz at power of 100 W or less). For more information, consult the ARRL website: arrl.org. ARRL Letter, May 28, 2015

Tuna Tin Transmitter

A few months ago we discussed the Tuna Tin transmitter. A matching receiver is also available and would be an excellent entry for our DIY contest in November. Selling for \$40, it is the Sudden Storm. The kit is QRPme's implementation of G3RJV Rev. George Dobbs Sudden Receiver as written up in the October 2006 Practical Wireless magazine. It makes the perfect companion receiver to the Tuna Tin 2 kit. It is an easy and straight forward kit to build with no surface mount parts. All of the parts come sealed inside a factory fresh tuna can with an easy open pull top lid and custom label. This kit is an excellent kit for beginners or experts alike and also makes a perfect gift. It can be assembled in one evening by a beginner. A great conversation piece for every QRPers bench! Available from QRPme at <http://www.qrpme.com/>



HAMCON 2015

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



September 11-13, 2015

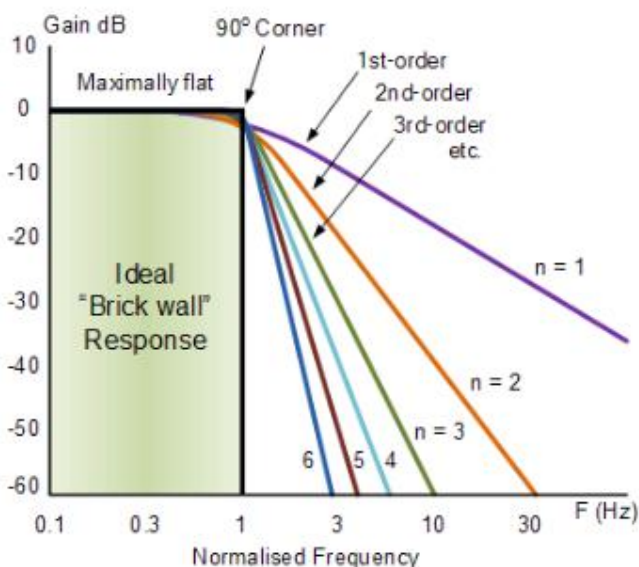
Flier and registration form can be found on club website (www.w6sba.org). Check out the details.

Register by end of July and save \$5 per person!

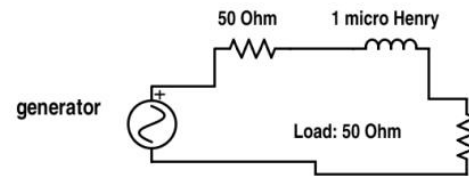
RF Filters: Part 4

Last month we discussed the types of RF filter types. To this, we need to add the distinction between active and inactive (or passive) filters. Passive implementations of linear filters are based on combinations of resistors, inductors, and capacitors. These types are collectively known as passive filters, because they do not depend upon an external power supply and/or they do not contain active components such as transistors. Active filters are implemented using a combination of passive and active (amplifying) components, and require an outside power source. However, their upper frequency limit is limited by the bandwidth of the amplifiers. We are going to discuss only passive filters. Specifically we are discussing what are called lumped filters. These are composed of only resistors, inductors, and capacitors.

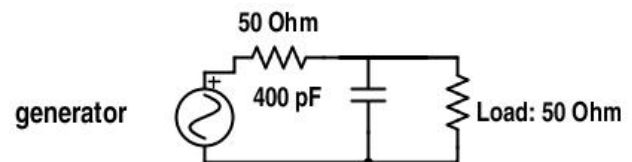
The steepness of the descent from the filter's pass-band to its stop band is dependent on the filter's order. In a lumped filter, the order is the number of energy storing elements in the circuit. This means the number of inductors and capacitors. For example, a filter containing one resistor and one capacitor has order one whereas one with five resistors, five capacitors and five inductors has order ten. The higher the order, the steeper are the filter's skirts and the more rapidly its response changes with frequency.



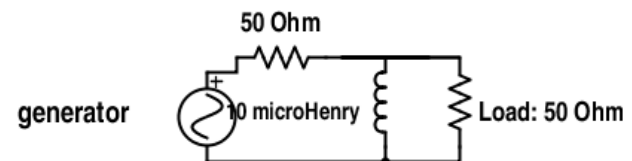
We are next going to consider two simple examples of low-pass filters of order one.



Less power is delivered to the load because, as the frequency increases, the reactance of the inductor does as well. Of course DC voltage is passed unimpeded. Our next example produces the same effect using a capacitor instead of the inductor.



In this example, the capacitor is in parallel with the load. As frequency increases, the reactance of the capacitor decreases, and less power is delivered to the load. As in the first example, since the capacitor blocks DC current, any DC is delivered to the load. If, in each example, we exchange capacitors and inductors, the result is a high pass filter. For example:



Here, when frequencies are low, the power flows through the inductor bypassing the load. But, as frequency increases, the reactance of the inductor increases delivering the power to the load. Therefore, this is a high-pass filter. Next month we will look at more complex filters.

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

Thursday Night Net
@ 7:30 p.m.

Don't FORGET!

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



News From

Joe

1. **Attendance drawing:** Yes we had another winner, Kostek-K6MNA had his ticket drawn and won the kitty since being present. However, Kostek wanted to donate the winnings to the club which seemed unfair. It was suggested we credit his membership account for 2016 membership. Congratulations Kostek and thank you for being with us. Next drawing will be on June 18, 2015 for 20 dollars. You must be a member in good standing and be present in order for you to win.

2. **Thank you:** Thank you team for making our main presentation at our May 21, 2015 meeting so spectacular. Alan -KG6ZPL, our President, started this with explaining how antenna analyzers worked, its functions and the purpose and use of the analyzers. The group was split into 4 different groups for a hands-on practical experimentation of trimming several different antenna configurations. While the measurements indicated compromised end results due to the various factors influencing the results because of the immediate surroundings (on tables and such) it certainly proved the theory the effect of length of the elements on the 2m dipoles. We thank especially Paul-KK6BY for providing the 4 long dipole packages for the 2m part of it. Those were fantastic and certainly proved the point. Tom-KI6RC, Ray-WA6OWM, Paul-KK6BY and JoeWB6MYD assisted the 4 groups to achieve the objectives set out to reach by trimming the elements so the point was well made about the length of the elements. Thank you everyone for a job well done.

3. **Field Day:** Since the 2015 Field Day event will be a week from this meeting date we have several questions needing to be looked at regarding setup schedule, logging, operations and takedown schedules with a big part on food. As you know we will start setting up on top of the West Parking Structure at 5:00pm on Friday June 26th. We hope to set up as much of the antenna's as possible so Saturday morning set up of the stations and all other things to be accomplished before 11:00am. FD will start at 11:00am and runs 24 hrs to 11:00am on Sunday June 28th. So please let us know if you wish to partake of all 3 meals being offered or one. We are asking for 25 dollars for all 3 or 10 dollars for individual meals. It is important so enough food may be prepared and purchased in time. Lunch and dinner plus snacks are on tap for Saturday and breakfast for Sunday. So please let us know asap. We also need to know the assistance available for setting up antenna's, transporting the tables and chairs we borrow for the facility. This is also so for returning the equipment to its storage space at Joe's. This is all doable but needs to be seriously considered if you will as in the past. Remember this one week-end which we are obligated to fulfill as HAM's. No one wants to talk about this and we hope will never need to be done for real but it is coming one of these days. So let us prepare our self so we can serve ourselves as well as our community. See you all at Field Day. If more information needed please see any one of the officers. Thank you. Joe-WB6MYD

4. **Email address:** You never want to do this but it happens: I am switching providers due to the high cost on my present email provider. The new email address will be jmlanphen@att.net please make a note of this. Thanks.

5. **Hamcon 2015:** This is coming up in September right here in Torrance at the Marriott. This is not the first time and hopefully neither the last time. This ARRL SW Div convention comes around every 4 years. Please realize this joint event by 13-15

clubs here in the area that are working hard to make this again an very memorable convention. The SBARC is once again providing the talk in station and more importantly the W1AW/6 station operation. We are working hard to make this a very enjoyable event for all of us and so not to over work just one or two members. We would like to get everyone involved and or participate. We are scheduled for set up along the East and in front of their parking structure for this and it is a total dedicated area for this. One thing we are still looking for is an mobile home or camper or even an camping trailer to house the W1AW/6 station so convention attendees can operate the W1AW/6 station from here. If you have such an convenience will you provide access for a couple of days. If you have a friend or perhaps someone please help us by asking for permission to use it for 3 days.

6. **SBARC Contest:** We are having another WAM contest. You hopefully have received the rules well before the Arc Over being posted on the web. The dates are June 13 and 14. Times are from 11am on June 13 till 6:59pm on June 14th which is on Saturday and Sunday. This also coincides with the ARRL VHF/UHF and so we hope to see everyone participate in your own way. The rules will be send to all members in plenty of time before the contest. Good luck and may the best one win.

7. **The Hamcon 2015** ARRL SW Division flyer and registration form are available to you on a link on our website. Please go to www.w6sba.org and click on those 2 links for calendar of events and Hamconinc link for the reservation form. Remember the early bird registration saves you 5 dollars if you use that before August 1, 2015. Please check it out.

8. I unfortunately have had to take a new e mail address and so please note my new e mail address: jmlanphen@gmail.com This has been very difficult to do since while having moved the address book over from the old account to the new did not include the group accounts I had and used all the time. I am working with it and I hope you'll will put it in your address as well of course. Thank you.

9. **Updates:** I once again would like to ask you to be sure to let me know any updates on your end. This for so many of us is the only way we seem to get information from to us all. If any errors occur neither you or I will get anywhere. So please keep us updated on your phone number as well as email account. Thank you.

10. **Field Day Food order:** Please let us know if you plan to participate in our Field Day cook out (I'll just call it that). For 25 dollars you can have all 3 meals which are Saturday lunch, Saturday dinner and Sunday breakfast. Anyone of these meals will cost 10 dollars each (you see your savings of 5 dollars right?). We do really need to know because food has to be ordered and prepared. So please help us out. Let especially Joe know at 310-328-0817 or jmlanphen@gmail.com.

11. **Notices:** Yes I am sorry but as always we have a lot of info to dispense for our field day event on June 27-28, 2015. Things need to be done and provided for. So please help us out by letting us know how or when you are going to help us during that weekend.

12. **FD location:** If you sign into your ARRL account and look for Field Day locator you will also see the W6SBA taking you to the West Parking structure top deck. You can of course find any Field Day location as long as it has been posted on that site. Please check it out.

13. **Calendar of events:** Yes we have posted the calendar on our website. Please click on the link posted for the calendar of events. It's a work in progress but please check it out.

CALENDAR

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

Club Meeting - 3rd Thursday of the month
June 18, 2015 - 7:00 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,
June 27, 2015, 7-11 a.m.
(Field Day this day)

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

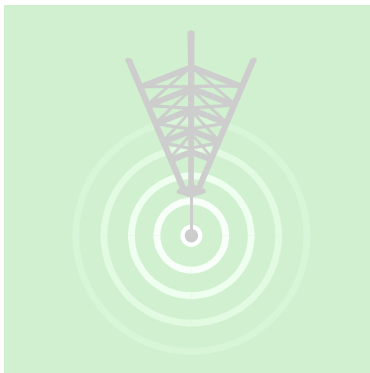
Awards Manager (HF/VHF)	Cliff - K6LH
Health & Welfare	Joe - WB6MYD
Swap Meet Chair	Joe - WB6MYD
VE Test Liaison	Joe - WB6MYD
VE Test Sessions	Joe - WB6MYD
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South Bay Amateur Radio Club Repeater
224.38 MHz · PL - 192.8 Hz Offset -1.6 MHz
(See Calendar for Weekly Net Times)

NEWSLETTER SUBMISSION

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W6SBA@arrl.net
Website: <http://www.w6sba.org>

TO:



Address Correction Requested

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W6SBA

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