



September 2016

ARCO *vet*

A Community Service Organization Dedicated to Amateur Radio Since 1970

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E-mail: W6SBA@arrl.net



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Hi everyone:

Well, Summer's now about over and we had a good one. First we had an excellent Field Day and this was followed by two great picnic's. We had the second one which was, if anything, even better than the first. We set up a 20 meter dipole which was only about twelve feet above the ground, if that, and reached the East coast with it using less than five watts. Not bad! We also had a Fox Hunt and the fox, as usual, lost. Please don't call the ASPCA, the fox is just a transmitter. The food was also great. Many thanks to Paul, KK6BY, and Chuck, K6CSH, for putting both picnics together, providing the food and cooking it, and to Bruce, KK6BJ, for providing the fox. Tom, KI6RC, was active on the radio.

Our last big operating event of the year is JOTA which is on October 15th this year and we will again be operating from the Cabrillo Youth Center in San Pedro. Our set-up will be about the same as last year's as far as we know at this point. We will be there from about 8:00 AM until 8:00 or 9:00 PM. Our biggest need is people to help man (or woman) the stations. We will have two shifts of about six hours each but, if we get enough volunteers, we can have more and shorter shifts. By the time you read this, you should have received an e-mail requesting your help. We will also be taking names at the next meeting. Please seriously consider volunteering to either go down to San Pedro or to operate from home so that the Scouts have somebody to talk to. This is an important opportunity for us to introduce amateur radio to the next generation of Hams. Please don't miss it!

The sign-up for the Pixie transceiver project is over. We have had at least sixteen club members sign-up for the project with one member who is away for a while building two more kits. Since every member of the Council has one, this means that there will be at least twenty-four Pixie's in the club. We have reserved a room at the Medical Center (where we have our meetings) on November 5th and 12th for building sessions which will be in the mornings. Those who have signed up will receive more information as to which session you are assigned and as to what you should bring with you. This should be a fun project and I am really encouraged by the large number of members who are participating.

Also in November is our annual election for Council members. We are looking for people who are willing to contribute to their club. This club, contrary to popular opinion, does not run itself. Events such as Field day, JOTA, picnics, the Christmas Party, monthly meetings, ARCOVER articles, and DIY projects do not appear out of thin air for the enjoyment of our members. They require work and commitment from your Council members. I'm not trying to scare you away. There is some work attached but there is also fun and satisfaction. If there weren't, I would not have been on the Council for the last seven years and Joe's tenure on the Council must be approaching one-hundred years (maybe a little less). So, if asked, please consider giving some of your time to help insure that our club has a bright future. Thanks! That's all the news that fit to print for this month so good bye and 73,

Alan

CLUB OFFICERS FOR 2016

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Jim Langford, K6JGL, will be the August SBARC speaker and will be presenting his experience and practical tips on the history and use of the National Traffic System (NTS). His main interest in amateur radio is in Emergency Communications. He holds ARRL Appearances as LAX Section Official Relay Station and Pacific Area Digital Relay Station since 2012. He has an Amateur Extra license and was licensed in 2010. He retired in 1996 from Hughes Space and Communication Company. He is active in the LAX LAN net Relay Station, is a NTSD Liaison and operates Winlink Remote Message Server (RMS) -PACTOR, WINMOR, and PACKET

Please join us on September 15th 7:30 PM in the West Health Conference Center, Torrance Memorial Medical Center room 3 for this most interesting presentation.

IDENTIFY YOURSELF

In a Forfeiture Order released on July 29, the FCC fined David J. Tolassi, W4BHV, of Ringgold, Georgia, \$1000 for failing to properly identify. The FCC had proposed the fine 1 year ago in a Notice of Apparent Liability for Forfeiture (NAL), noting that Tolassi had been warned the previous summer about not following Part 97 ID rules. The FCC said at the time that Tolassi's "deliberate disregard" of the earlier warning warranted the proposed penalty that it reaffirmed this month.

The FCC said Tolassi did not deny transmitting on 14.313 MHz on the date in question, but he argued that his comments were within the 10-minute window mandated by the rules. The FCC disagreed, however, noting that Tolassi never identified during 15 minutes of transmissions that agents had monitored.

Tolassi had requested the FCC cancel the NAL and substitute a Warning Letter, asserting that the FCC has issued multiple warnings before imposing fines in similar cases. Tolassi was not being treated any differently than other licensees have been, the FCC countered. ARRL Letter 8/4/2016



- 1) A man had 5 lengths of chain, each containing 3 links. If it costs \$1 to open a link and \$1 to weld a link back together, what is the minimum cost to make 1 chain out of the 5 lengths?
- 2) Translate this: YYURYYUBICURYY4ME. The following two questions are a continuation of last month's last two questions
- 3) The Lion King is hosting an animal conference. All the animals attend.... except one. Which animal does not attend?
- 4) There is a river you must cross but it is used by crocodiles, and you do not have a boat. How do you manage it?

Answers to August's Quiz

- 1) I have five different kinds of stamps, all of the same denomination. It takes three stamps to mail a letter. If I use three different stamps on each, how many letters can I send?
10. This answer assumes that all orderings of stamps on each envelope are the same, i.e., if the stamps are labeled A, B, and C, then ABC on an envelope is the same as BAC. If you assume orderings are different then there are 60 possibilities.
- 2) Over a period of years, how often (in terms of once every how many days) does Friday, the 13th occur? *A year averages 365 1/4 days long so the 13th occurs once in 365.25/12 days. The day of the week is equally likely to be any one of seven days, so we have Friday the 13th occurring once every (365.25/12) x 7 = 213 days.*
- 3) How do you put a giraffe into a refrigerator?
Open the refrigerator, put in the giraffe and close the door.
- 4) How do you put an elephant into a refrigerator?
Open the refrigerator, take out the giraffe, put in the elephant and close the door.

Please send answers and comments to Alan at thermic72@sbcglobal.net

Two Free Amateur Radio Courses

FCC **“Technician”** course (entry level)
FCC **“General”** course (2nd level)

Sessions on Nov. 05 & 12
(each course is 2 sessions)

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 Nov. 19th

At the start of the 5 November Technician course, the Palos Verdes Amateur Radio Club will give a 30 minute presentation on how to get further involved with amateur radio.

Class location
is at **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 courses.
Taking the FCC test fee 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 Walt's Power Point charts, \$22 for the Technician and \$22 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 test session, regardless of age, will receive a free membership in the Palos Verdes Amateur Radio Club for the remainder of the current calendar

Three Companies Agree to Plead Guilty for Fixing Prices of Electrolytic Capacitors

The US Department of Justice announced this week that three companies have agreed to plead guilty for their roles in a conspiracy to fix prices for electrolytic capacitors sold to customers in the US and elsewhere. The companies are Rubycon Corporation, Elna Co Ltd, and Holy Stone Holdings Co Ltd.

"The Antitrust Division has now charged five companies and one individual for their participation in this international price-fixing conspiracy," Deputy Assistant Attorney General Brent Snyder of the Justice Department's Antitrust Division, said in an August 23 Justice Department news release. "The electrolytic capacitors conspiracy affected millions of American consumers who use electronic devices containing capacitors every day."

The division filed one-count felony charges against each of the three companies in US District Court in San Francisco. In addition to pleading guilty to the charges against them, each company has agreed to pay a criminal fine and to cooperate with the Division's ongoing investigation. The plea agreements are subject to court approval.

NEC TOKIN Corp and Hitachi Chemical Co Ltd already pleaded guilty earlier to participating in the same worldwide conspiracy. ARRL Letter 8/25/2016



Growth in New Amateur Radio Licensees Ahead of Last Year's

The ARRL Volunteer Examiner Coordinator (VEC) reports that 20,447 new US Amateur Radio licenses have been issued since January 1. That's nearly 1500 ahead of the number that had been issued by this time last year. At the present pace, the US is on track to exceed 30,000 new radio amateurs for the third straight year by the end of the year.

"While I am thrilled with this prospect, I'm also keenly aware that without some mentoring, these new hams' initial curiosity and enchantment may fade if they don't get on the air right away," said ARRL VEC Manager Maria Somma, AB1FM.

"Let's show these new hams what the magic is all about," she urged.

In addition, the ARRL VEC reports that upgrades are on track to reach nearly 11,000 by year's end. ARRL Letter 8/11/2016



New 220 Champ on the Block

By Alex Marko, KD6LPA

One of my absolute favorite radios of all time has been the Kenwood TH-F6a. It's extremely easy to use, covers virtually all frequencies, and very simple to program. But perhaps the most important feature is that it's the only HT than can transmit a full 5 watts on 220. Until now...

Introducing the TH-D74a. It appears to be a combination of the F6 and the TH-D72a (an APRS radio).

The D74 has an incredible host of features, including Color Display, D-STAR, APRS, DTMF Memory, 1200/9600 bps TNC, Integrated GPS, Bluetooth and Extended Receive on HF (CW/SSB). And of course, it's a tri-bander!

Like the F6, the D74 has two built-in receivers. According to the Universal-Radio web site, Receiver [A] covers 136-174, 216-260 and 410-470mhz. Receiver [B] covers 0.1 to 524mhz. The radio also includes four settings for RF power (0.05, 0.5, 2, and 5 watts).



Perhaps the most practical feature is the addition of Bluetooth. Most cars today allow the driver to make or receive telephone calls via Bluetooth without touching their cell phone. (In California, it's illegal to drive while holding your cell phone). The amateur radio community seems to be moving in the same direction by offering Bluetooth capability in the newer radios. It's certainly a lot simpler installation. No wires whatsoever! Hopefully, Kenwood will provide an add-on accessory to enable the driver to activate the PTT switch over Bluetooth so there's no need for the user to be holding the radio while driving. (Kenwood – I hope you're reading this!)



Another surprising feature is the addition of a Color TFT screen. In addition to providing general frequency information, one of the new features is an integrated compass that shows real-time information of a local station, including distance, bearing and moving speed. It can also present weather information (from APRS observation stations) including wind direction, wind velocity, atmospheric pressure, humidity and temperature.

As mentioned earlier, the D74 incorporates all of the features of the APRS features found in their D72 unit (a 2m/440 hand held). If you're unfamiliar with APRS, it's a mechanism to allow hams to broadcast their current GPS position over the national 144.390 frequency. The D74 has a built-in TNC to encode/decode the APRS signals and contains a built-in GPS so you have everything you need in for transmitting and receiving other hams on the move.

One of the biggest surprises was to see Kenwood introduce D-STAR into their radio lineup. Up until now, it seemed like ICOM was the only manufacturer offering D-STAR technology. D-STAR is an advanced digital voice technology. So it looks like Kenwood is making a big entrance into the digital voice sector. Many people believe that AM transmissions will be going the way of the do-do – not because it's inferior, but because of limited spectrum space. Both the FAA and FCC are purportedly exploring Digital Voice communications in an attempt to squeeze more radio signals into the same physical spectrum and thereby increase the number of radio channels available. The downside of digital technology is that it doesn't decode very well when there's interference. So either you get a perfect signal, or something undecipherable (as if you were talking to a droid from Star Wars).

Another big feature is the introduction of a micro-USB interface. The USB interface will enable the user to connect the radio to a laptop, so you can visually display each station's position on a map (using an APRS client). Pretty cool! Even for traditional tasks, such as programming the radio – having a standard USB cable is a such a huge improvement over buying a separate cable that only works with a specific radio. Way to go Kenwood!

(continued on page 6)

New 220 Champ on the Block Con't.

The radio also includes an IF filter to help reduce adjacent frequencies when receiving SSB and CW. For SSB, the selection range is from 2.2 – 3 kHz. CW is 0.3 to 2.0 kHz and AM is 3.0 to 7.5 kHz.

Other miscellaneous features include a microSD/SDHC memory card, free computer software for managing various frequencies in memory, an audio equalizer to allow sound quality adjustments in certain modes, and an IF output mode thru USB (most likely to allow data to be presented graphically in a waterfall format on your connected PC).



Okay – now for a little unpleasantness. How much does this radio cost? At the time of this writing, the MSRP is listed at \$699. The Universal-Radio web site has already posted their discounted price at \$649. If you're feeling a little sticker shock, think about all the features you're getting. If you had to buy a stand-alone GPS, a Bluetooth module, and an external TNC, plus an 2m/440 radio, how much would you have spent? Most likely, you'd easily be in the \$700+ price range. Now think about the convenience of having all of that technology seamlessly integrated into one small box – that's extremely portable and doesn't require a dozen wires to integrate all the disparate components. Think how cool it will be to have wireless connectivity into your car's audio system! If you're into APRS or you want to explore the latest Digital Voice technology, this is a must have!!!

The radio is expected to be available towards the end of September. For more information, you can visit the following links:

- <http://www.universal-radio.com/catalog/ht/4074.html>
- <http://qrznow.com/new-release-of-144430-mhz-dual-bander-th-d74-kenwood/>
- https://www.reddit.com/r/amateurradio/comments/4zj1gf/new_kenwood_dstar_ht_thd74a_price_at_650usd_wow/

Alex Marko, KD6LPA

FCC Proposes Rule Changes in Response to ARRL's "Symbol Rate" Petition, Seeks Comment

The FCC has proposed to revise the Amateur Service Part 97 rules in response to the ARRL's so-called "Symbol Rate" Petition for Rule Making (RM-11708), filed in late 2013, and it has invited comments on its recommended changes. The Notice of Proposed Rule Making (NPRM) in WT Docket 16-239, released on July 28, had been making the rounds at the FCC since May. ARRL had asked the FCC to change the Part 97 rules to delete the symbol rate limit in §97.307(f) and replace it with a maximum bandwidth for data emissions of 2.8 kHz on amateur frequencies below 29.7 MHz.



"[W]e believe that the public interest may be served by revising the Amateur Service rules to eliminate the current baud rate limitations for data emissions, consistent with ARRL's Petition, to allow Amateur Service licensees to use modern digital emissions, thereby furthering the purposes of the Amateur Service and enhancing the usefulness of the service," the FCC said in its NPRM. "We do not, however, propose a bandwidth limitation for data emissions in the MF and HF bands to replace the baud rate limitations, because the rules' current approach for limiting bandwidth use by amateur stations using one of the specified digital codes to encode the signal being transmitted appears sufficient to ensure that general access to the band by licensees in the Amateur Service does not become unduly impaired."

While tentatively concluding that a specific bandwidth limitation for RTTY and data was not necessary, the FCC nonetheless invited comments on whether it should set emission bandwidth standards for Amateur Service MF/HF RTTY and data emissions.

Under the current rules, "specified digital codes" in Part 97 may be used with a symbol rate that does not exceed 300 baud for frequencies below 28 MHz, with the exception of 60 meters, and 1200 baud in the 10 meter band. The baud rate limits were adopted in 1980, when the FCC amended Part 97 to specify ASCII as a permissible digital code.

Comments in the proceeding will be due 60 days after the date that the NPRM appears in the Federal Register. ARRL Letter, 8/4/2016



1. **Attendance drawing:** We had a winner. Alan-KG6ZPL name was drawn and was present. He was presented the 20 dollars as the lucky winner congratulations Alan. The Sep kitty will 20 dollars. Be sure to be present to win and be a member in good standing of course.
2. **Thank you:** Chris-WA6WNL made an excellent presentation to our group at a very short notice. The importance of the LASD Communication system to keep all deputies throughout LA County in touch is and will always be the main concern for this large organization. I am sure you can all be grateful for the excellent job these deputies do to serve and protect us at all times. Thanks Chris for shining a light on the elaborate system used to communicate with all the deputies out in our difficult terrain of Los Angeles County. He also provided some information on frequencies used that we could program in scanners.
3. **Club project:** A small 40m transceiver project is now scheduled thanks to Bruce-KK6BJ for the 1st and 2nd Saturday in November. The location to do this is a little area at the Health Conference Center and is an open eating area perfect for this kind of project, thank you Bruce. As you know the kit is available for members for free as long as you take steps to build this kit. More details will be made available at meetings and Thursday night nets and via e mails of course. You will be assisted on the above mentioned dates to complete this project hopefully one of those Saturday's. So please stay tuned as time goes on.
4. **Picnic:** Yes the 2nd picnic for this year was Saturday 8/20 at the De Portola park as usual which is such a great place. We practically had the whole park to ourselves. Tom-KI6RC managed to get at least 4 contacts using 2.5w QRP for sure into a vert antenna clamped to the table and was powered with a small battery. Worked really great. Bruce also showed several projects he has completed which is also fantastic. Thank you Chuck-K6CSH and Paul-KK6BY for the arrangements and providing the cooking etc etc. good job. It really is good to see all of us working this on that beautiful Saturday. Meeting the harmonics from Kirk-KK6KC was also really appreciated (this is so since I hope others will also bring their kids next time). Thank you for your support.
5. **DIY:** This is still scheduled for November. Please remember to show and tell about your own ham related project you have or will complete during this year. Actually it has no time limit. Any project you've done and is ham related and you perhaps use please show us we would like

to see it all as well. the details still need to be worked out since so few have offered to present something. Please stay tuned.

6. **Elections:** Yes it is that time of year again. Please remember the club does not run itself. We have a dedicated staff if you will making things happen from meetings to all those other activities we all seem to be enjoying. We've been able to maintain our membership numbers pretty well every year for many years. We hope for some new members to join in this effort and provide some new thoughts and experiences into the SBARC. If you have any ideas for the group please let us know. Otherwise help us to continue with some new thoughts in what you would want us to do. New idea's is what any club should look for at all times. Please see any of the present Council members if you would want to share something with us for the betterment of our group. Remember this is your club and the only way things will work is if we all do something. Thank you for your continued support.
7. **CPR:** Yes is this still very much on our schedule. Bruce-KK6BJ is looking for a location to conduct this class. He has a committed group to present this and is hoping for about 40 applicants to sign on for this. Those of us getting on in years would definitely benefit from this as perhaps caregiver etc.
8. **Field Trip:** I don't know about you but this one really peeks my interest. Bruce-KK6BJ is making arrangements for us to visit JPL Laboratory sometime early next year. Again this is in the planning stages but if you have any interest in this at all be sure you watch for any notice on this so you to will be included. Our technology is changing so fast it is even hard for anyone keeping up with this. We so often here about all these new things coming up or be planned. Well a lot of this is coming from JPL. Please realize that we might want to think about car pooling for this since this trip is some distance from here. As always, we need to communicate this so we all know what's going on not just those coming to the meeting and such. Be sure to let us know if you would want to participate.
9. **Swap meet:** Yes we continue with our presence at the TRW swap meet on the last Saturday of the month. Tom-KI6RC, Chuck-K6CSH and Bill-KQ6Z have been alternating in taking care of this and a good job they are doing. Our presence is twofold a. we like to have representation for the club out there and b. provide an opportunity for our members to sell items. We need donations from members to make this profit-table for you as well as the club. Please donate or sell.

Please join us on
W6SBA 224.38 minus
offset and the PLat 198.2
hz on Thursday at
7:30pm. 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
September 15, 2016 - 7:30 p.m.
Torrance Memorial Med Center
Health Conference Center, Room 3

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,
September 24, 2016, 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

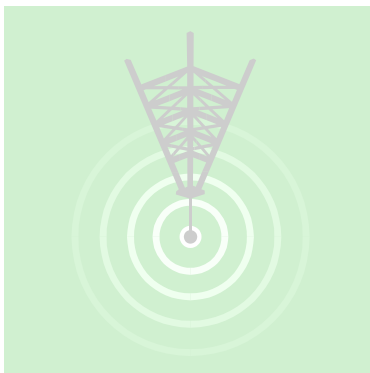
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South Bay Amateur Radio Club Repeater
224.38 MHz · PL - 192.8 Hz Offset -1.6 MHz
(See Calendar for Weekly Net Times)

NEWSLETTER SUBMISSION

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