



August 2018

ARCOver

A Community Service Organization Dedicated to Amateur Radio Since 1970

In this issue:

- ◆ ARRL Urges
- ◆ 2018 Club Officers
- ◆ August Meeting
- ◆ Quiz Corner
- ◆ FCC Proposes
- ◆ BSA-Operation On-Target Radio Support
- ◆ Significant Changes in Store
- ◆ Radio Amateur to Pay
- ◆ Parity Act Options Open
- ◆ More ARRL Contest Award Certificates
- ◆ Emergency Prep
- ◆ The Information Spot



E-mail: W6SBA@arrl.net



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

ARRL Urges Regulatory Regime to Keep Non-Amateur Satellites off Amateur Spectrum

ARRL wants the FCC to facilitate bona fide Amateur Satellite experimentation by educational institutions under Part 97 Amateur Service rules, while precluding the exploitation of amateur spectrum by commercial, small-satellite users authorized under Part 5 Experimental rules. In comments filed on July 9 in an FCC proceeding to streamline licensing procedures for small satellites, ARRL suggested that the FCC adopt a "bright line test" to define and distinguish satellites that should be permitted to operate under Amateur Satellite rules, as opposed to non-amateur satellites that could be authorized under Part 5 Experimental rules.

"Specifically, it is possible to clarify which types of satellite operations are properly considered amateur experiments conducted pursuant to a Part 97 Amateur Radio license, and [those] which should be considered experimental, non-amateur facilities, properly authorized by a Part 5 authorization."

ARRL said it views as "incorrect and overly strict" the standard the FCC has applied since 2013 to define what constitutes an Amateur Satellite, forcing academic projects that once would have been operated in the Amateur Satellite Service to apply for a Part 5 Experimental authorization instead. This approach was based, ARRL said, on "the false rational" that a satellite launched by an educational institution must be "non-amateur" because instructors were being compensated and would thus have a "pecuniary interest" in the satellite project. ARRL said well-established Commission jurisprudence contradicts this view.

ARRL told the FCC that justification exists to expand the category of satellite experiments conducted under an Amateur Radio license, "especially those in which a college, university, or secondary school teacher is a sponsor." But, ARRL continued, a compelling need exists to discourage Part 5 Experimental authorizations for satellites intended to operate in amateur allocations by non-amateur sponsors, "absent compelling showings of need."

"There is no doubt but that Amateur Radio should be protected against exploitation by commercial entities, and there should be a compelling justification for a Part 5 Experimental license issued for a satellite experiment to be conducted in amateur spectrum," ARRL said. ARRL noted that International Amateur Radio Union (IARU) policy regarding satellites operated in Amateur Radio spectrum is only to coordinate satellites where licensees and control operators are radio amateurs, as well as having a "mission and operation" consistent with the International Telecommunication Union (ITU) Radio Regulations' definitions of the Amateur and Amateur Satellite services.

ARRL asserted that incorporating Amateur Radio in experiential learning using small satellites -- e.g., CubeSats -- is good for Amateur Radio, for students, and for the advancement of technology, and it urged the FCC to adopt a regulatory paradigm that encourages this approach. AMSAT-NA also filed comments in the proceeding. The AMSAT remarks reflect several of the same concerns expressed by ARRL. Interested parties may file reply comments in the proceeding, IB Docket No. 18-86, by August 7, 2018. ARRL Letter 7/12/2018

< 2018 CLUB OFFICERS >

President: Ray Grace -WA6OWM 2706 Spreckels Ln, Redondo Beach, 90278 310-370-1913 wa6owm@arrl.net

Vice President: Bruce Jackson-KK6BJ 4020 The Strand, Manhattan Beach, 90266 310-502-0071 bjackson@ucla.edu

Secretary: Ed Hinz- KN6JN 2569 W.230th Street, Torrance 90505 310-325-7944 KN6JN@aol.com

Treasurer: Joe Lanphen-WB6MYD. 21125 Budlong Ave. Torrance, 90502 310-328-0817 jmlanphen@gmail.com

Council: Chuck Hohn-K6CSH. 17203 Atkinson Ave. Torrance, 90504 310-941-5679 chuchohn@gmail.com

Council: Heidi Stromburg-KG0GGY 20622 Vermont Ave #25, Torrance, CA 90502 310-505-8828 blancabasura@me.com

Council: Alan Parks-KG6ZPL. 10746 Francis Pl. #234, LA, CA 90034 310-558-8718 Thermic72@sbcglobal.net

Council: Steven Morris- KM6EMF 2601 Alvord Ln, Redondo Beach 90278 949-690-3877 kf6jvt@aol.com

Past President: Alex Marko-KD6LPA 1843 W.243rd Place, Torrance, 90501 310-530-6614 kd6lpa@socal.rr.com

August

PRESENTATION

Emergency Preparedness



Diana Feinberg AI6DF

Diana Feinberg AI6DF has been the ARRL Los Angeles Section Manager for the past 2 years. She is the Past President of the Palos Verdes Amateur Radio Club, is the Chairman of the Los Angeles Area Council of Amateur Radio Clubs and was the chairman of the 2105 Hamcon ARRL SW Division Convention, and is an avid Dxr.

She will be discussing emergency preparedness, mesh networking in LA County and hopefully a bit about her passions for activating lighthouses and other neat amateur radio activities.

**Ready for an
Emergency?**
You can be.



CORNER

WITH ALAN, KG6ZPL

- 1) I went shopping one day last week. I had my hair cut, bought a newspaper, bought a tomato at the farmer's market, got some aspirin at the drugstore, and cashed a check at the bank. The barber is closed on Mondays, the bank on Saturday and Sunday, the farmer's market is only open on Saturday, Wednesday, and Friday, and the drugstore is only closed on Sundays. On which day of the week did I shop?
- 2) Fred is the 25th fastest and the 25th slowest in his gym class. How many are there in the class.
- 3) Name the next letter in this sequence: JFMAM-JJA
- 4) I am an odd number. If you take away one letter of my name, I become even. What number am I?

July 2018 Quiz Answers

- 1) If I have 3 dimes, 3 nickels, and 3 quarters, how many ways can I make change for a dollar? **Two ways. Solve $5N + 10D + 25Q = 100$. The two solutions are $N=1, D=2, Q=3$, and $N=3, D=1, Q=3$.**
- 2) In a room, 14 people are blonde, 8 have blue eyes, 2 are neither blonde nor blue-eyed, and 5 are blue-eyed blondes. How many people are in the room. **19. a =blondes with blue eyes = $14-5=9$, b =blue-eyed but not blonde= $8-5=3$, c =blue-eyes blondes= 5 , and d =people with neither blue eyes nor blonde= 2 . $a+b+c+d=9+3+5+2=19$.**
- 3) What has a head, a tail, is brown, and has no legs? **A penny.**
- 4) What did Mrs. Claus say to Santa when she looked up in the sky? **It looks like rain dear.**

Send answers, comments, etc th Alan at thermic72@sbcglobal.net

**Thursday
Night
Net**

Please join us on W6SBA 224.38 minus offset and the PLat 192.8 hz 7:30pm on Thursdays. You can share any info or just say hello!

FCC Proposes \$18,000 Fine in Louisiana Amateur Radio Interference Case

The FCC has issued a Notice of Apparent Liability (NAL) proposing to fine Jerry W. Materne, KC5CSG, of Lake Charles, Louisiana, \$18,000 "for apparently causing intentional interference and for apparently failing to provide station identification on amateur radio frequencies," the FCC said.



"Mr. Materne was previously warned regarding this behavior in writing by the Enforcement Bureau and, given his history as a repeat offender, these apparent violations warrant a significant penalty," the FCC said in the NAL, released on July 25.

In 2017, the FCC received numerous complaints alleging that Materne, a General-class licensee, was causing interference to the South West Louisiana Amateur Repeater Club W5BII repeater, preventing other amateur licensees from using it. In March 2017, the repeater trustee banned Materne from using the repeater.

Responding to some of the complaints, the Enforcement Bureau issued a Letter of Inquiry (LOI), advising Materne of the allegations and directing him to address them. Materne denied causing interference, but admitted to operating simplex on the repeater's output frequency. In June 2017, the FCC received an additional complaint alleging that Materne had repeatedly interfered with an attempted emergency net that was called up as Tropical Storm Cindy was about to make landfall. The complaint maintained that Materne "repeatedly transmitted on the repeater's input frequency, hindering the local emergency net's ability to coordinate weather warnings and alerts on behalf of the National Weather Service," the FCC said in the NAL.

Local amateurs were able to track the interfering signal to Materne's residence and confirmed their findings to the FCC, prompting a Warning Letter advising Materne of the complaint and pointing out that his behavior "as described in the complaint would be a violation of Section 97.101(d) of the Commission's rules." Materne responded to the Warning Letter to argue that it was legal to transmit on the repeater's output frequency, further stating that "he was tired of this trash harassing me," the FCC said.

In the wake of further complaints, FCC agents visited Lake Charles, tracked transmissions on 146.130 MHz to Materne's residence, and monitored them for up to 7 hours. The agent reported hearing Materne "playing music on 146.130 MHz and warning other amateur operators that the local Amateur Radio club would not be able to conduct their net later that day."

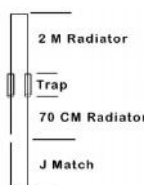
That evening, the agent watched as Materne drove to a location near the W5BII repeater, where, the agent said, Materne "began transmitting an amateur digital radio signal from a hand-held radio in his vehicle," disrupting the

net and failing to identify. Subsequently, the agent, accompanied by a deputy from the Calcasieu Parish Sheriff's Office, approached Materne's vehicle and confirmed that he possessed a radio capable of operating on 146.130 MHz. "Audio recordings captured by the agent demonstrate that the intentional interference ceased as the agent and the Sheriff's deputy approached Mr. Materne's vehicle," the FCC said in the NAL. ARRL Letter 7/26/18

BSA – Operation On-Target Radio Support – Troop 948 – Keller Peak

Tom Essenpreis – KB9ENS

BSA Operation On Target What is it?: It's a high adventure Varsity Scout program activity. The basic idea is to have Scouts scattered across a particular area, located on mountain peaks or other prominences within line of sight. Using large signaling mirrors, they relay messages from peak to peak.



Radio?: Yup, mirrors are nice, but for real time coordination the Scouts rely on hams for communications Operating Conditions: - TH-F6 HT – Speaker mic - Slim Jim ladder line J-pole antenna - PowerFilm Solar Lightsaver Max Challenges: - Long Beach Boat race on primary freq - I was the only station that could hear and be heard by everyone; forced me to act as relay

BSA Operation On Target – Setup Location



BSA Operation On Target View from Bald Peak



BSA Operation On Target – Results

Sun-Flashing Crosstable: Operation On-Target 7/21/2018, Southern CA

Unit #/Name	Peak	Keller	Crestline	Cucamonga	Telegraph	Silver	Woode	Ranger	Bald
Troop 948	Keller Peak		16	31	32	101		28	42
Troop 788	Crestline Water Tank	16		15	16		87	39	36
Troop 413	Cucamonga Peak	31	15		3	77	91	51	33
Troop 45	Telegraph peak	32	16	3		79	94	53	36
Crew 76	Silver Peak	101		77			98		63
Troop 209	Mt. Woodson		87	91	94	98			
KA5ZOP	Ranger Peak	28	39	51	53				41
KJ8CBA	Bald Peak	42	36	33	36	63		41	

Legend:

- Positively Confirmed Flash
- Flash transmitted, Flash seen at target
- Flash not Possible - No line of sight
- Flash possible, but not achieved

Longest Flash:
42 miles, Keller to Bald Peak

Longest Radio Contact:
101 miles, Keller <-> Silver Peak

Significant Changes in Store for FT8 & MSK144 with WSJT-X Version 2.0 WSJT-X co-developer

Joe Taylor, K1JT, has announced that major changes are coming to the FT8 and MSK144 digital protocols when WSJT-X version 2.0 arrives in a few months. Taylor said version 2.0 should be ready by January.

"Much of the necessary programming is finished," Taylor said in a post to the Packrats reflector. "Many of the new features have been tested on the air, and we find them to work well."

Taylor was quick to point out that the new capabilities are not yet publicly available, not even in beta form. He said that he, Steve Franke, K9AN, and Bill Somerville, G4WJS, have been developing "enhanced versions of the MSK144 and FT8 protocols that extend the message payload to 77 bits."

"Don't rush to download something," he cautioned. "There is more testing and code optimization to do." He said current plans call for a beta-testing period "probably starting in mid-to-late September," with a full release "possible a couple of months later."

Taylor ticked off a few possibilities WSJT-X version 2.0 will bring to the table:

- ARRL Field Day operation with standard Field Day exchanges.
- ARRL RTTY Roundup operation with standard contest exchanges.
- North American VHF contest operation with full support of grid exchanges and rover (/R) call signs.
- European VHF contest operation with the exchange of six-digit grids, QSO serial numbers, and portable (/P) call signs.
- Better and more user-friendly support for compound and nonstandard call signs.
- A special "telemetry" message format for exchanging arbitrary information up to 71 bits.
- Support for the existing "FT8 DXpedition Mode," with a more powerful DXpedition Mode possible too.

"All of these features work seamlessly and automatically," Taylor said. "No 'contest mode' checkboxes are needed. In most situations, decoding sensitivity will be slightly better than at present for FT8; for MSK144 it will sometimes be about 0.5 dB worse. Occupied bandwidths will be the same as they are now, and false-decode rates will be significantly lower."

Taylor said WSJT-X version 2.0 will be available in time for users to digest the new documentation and to practice using the software before actually using it on the air, but he offered one important caveat. "The new protocols cannot be backward compatible with the existing ones," he said in his post. "We will probably provide some temporary 'bilingual' capability for FT8, but not for MSK144. It will be essential for users to upgrade to version 2.0 in order to use the new features and communicate with others who have made the upgrade."

Taylor promised "plenty of advance notice" about the transition period and a must-upgrade-by date. ARRL Letter 7/26/18



Radio Amateur to Pay \$7,000, Face Restricted Privileges to Settle FCC Interference Case

The US Department of Justice and the FCC have reached a settlement with Brian Crow, K3VR, of North Huntingdon, Pennsylvania, to resolve allegations that Crow intentionally interfered with the communications of other Amateur Radio operators and failed to properly identify. The core component of the settlement calls on Crow to pay \$7,000 to the US Treasury, the FCC and US Attorney for the Western District of Pennsylvania Scott W. Brady announced in separate July 3 news releases. In addition, Crow's Amateur Extra class license will be restricted to Technician-class privileges for 6 months, and he has agreed to discontinue contact with the individuals involved in this case. Crow's Amateur Extra privileges will be restored after 6 months, "if no new violations have been found," the FCC said.

"Amateur Radio licensees know that the rules require them to share the airwaves, which means that bad actors cannot plead ignorance," FCC Enforcement Bureau Chief Rosemary Harold said in an FCC release. "This settlement is a significant payment for an individual operator, and it sends a serious message: Play by the rules in the Amateur Radio band[s] or face real consequences. We thank the US Attorney's Office for understanding the importance of this type of case and pushing it forward to ensure a resolution that included strong penalties for substantial violations of the law."

The settlement resolves a civil complaint (USA v. Brian Crow [No. 17-595]) in Federal District Court for the Western District of Pennsylvania to recover an unpaid \$11,500 fine that the FCC imposed on Crow in a 2015 Forfeiture Order.

The FCC recounted in its Forfeiture Order that it had responded in March 2014 to "several complaints of intentional interference" on 14.313 MHz, and that Commission agents used radio direction-finding techniques to determine the transmission sources. According to the court complaint against Crow, FCC agents tracked transmissions to Crow's residence and monitored them for approximately 3 hours and heard him transmit slow-scan television (SSTV) signals and a prerecorded voice transmission of another Amateur Radio station on the frequency.

The FCC said it worked with Brady's office to craft the agreement with Crow arising from its Forfeiture Order "that found his behavior violated the Communications Act and the Commission's rules. ARRL Letter 7/12/18



Parity Act Options Open Despite Removal from Defense Authorization Act Conference Report

ARRL Hudson Division Director and ad hoc Legislative Advocacy Committee Chair Mike Lisenco, N2YBB, said this week's removal of Amateur Radio Parity Act (HR 555) language from the National Defense Authorization Act (NDAA) Conference Report was unfortunate, but does not kill the initiative. The Parity Act would ask the FCC to grant radio amateurs living in deed-restricted communities the right to install effective outdoor antennas. Lisenco said that while the language was removed from the final NDAA Conference Report, other viable options remain to see the Parity Act succeed.



"We were disappointed the Parity language didn't survive the conference process, but we do have other House-passed legislative vehicles that contain the language, including the Financial Services & General Government Appropriations bill, which funds the FCC," Lisenco said.

"We have always known that getting this legislation across the finish line was going to take a lot of effort," Lisenco said. "The legislative process is sometimes frustrating for ARRL members, but there is a way that our membership can be directly involved," Lisenco explained. "By contacting your Representative and Senators and telling them you want their support for the Amateur Radio Parity Act, you can help lend thousands of voices to echo the work of the ad hoc Legislative Advocacy Committee on Capitol Hill."

"It's not unusual for legislation to stall in Congress. To remove the logjam, we need our elected representatives in both chambers to know how much of a priority this bill is for our avocation," Lisenco explained. "The continued active support of ARRL members is critical in order to do that."

Lisenco said that Senator Bill Nelson (D-FL) has been the lead obstructionist during several stages of efforts to enact the Amateur Radio Parity Act, which has passed the US House of Representatives four times. Lisenco added that that Nelson's opposition makes no sense, as Florida desperately needs effective Amateur Radio disaster communications during hurricanes, and hurricane season is rapidly approaching.

ARRL General Counsel Chris Imlay, W3KD, said the House-passed version of the NDAA included the Parity Act language, but the Senate bill did not, and a House-Senate conference committee had to resolve a variety of differences in the two passed bills. He said the Senate Armed Services Committee Ranking Member was one of the "Big Four" who would have had to agree to keep the Parity Act in the final NDAA Conference Report, but unfortunately, he deferred to Nelson on the matter; without Senator Nelson's opposition to the bill, it would have passed Congress long ago.

More ARRL Contest Award Certificates Now Available for Download

The ARRL Contest Branch has announced that more contest award certificates are now available for download from the ARRL website in PDF and JPEG formats.

Just enter the call sign used. ARRL Contest Branch Manager Bart Jahnke, W9JJ, said downloadable certificates now are available for these additional events: the 2017 ARRL 10 GHz and Up Contest, the 2017 November Sweepstakes, the 2017 ARRL 10 Meter Contest, the 2017 160 Meter Contest, the 2018 RTTY Round-up, and the 2018 January VHF Contest. Jahnke said 2018 ARRL International DX Contest certificates would become available in the very near future.



Already available are downloadable certificates for the 2017 IARU HF Championship, the 2017 ARRL 222 MHz and Up Distance Contest, and the 2017 ARRL September VHF Contest. Jahnke said the new online certificates will offer enhanced content over what has been previously available on ARRL certificates. New recognitions have been added for Top 10 participants in a broader number of geographical (country, Division, Section) or categorical entries.

New event certificates will be announced as they are released. For those who never received a certificate or need to replace one, Jahnke said certificates for contests going back a decade or so are available for everything but the old UHF Contest and EME Contest. ARRL Letter 7/26/2018

Imlay has assured ARRL members that the Parity Act would be beneficial to the many thousands of amateurs now living in deed-restricted communities, as it would allow those hams to erect effective outdoor antennas notwithstanding the preclusive language of covenants or homeowner association (HOA) regulations.

"That is the principal benefit of this legislation," he said. "As I see it, without the Parity Act, Amateur Radio will, over a relatively short period of time, face death by a thousand cuts, as more and more communities are subject to private land use regulations that prohibit antennas entirely." Lisenco said it was important to keep the legislative efforts in context. "A decade ago, our bill was being introduced every 2 years and gathering less than 2 dozen cosponsors before being forgotten and tossed in the heap. Since we've created the ad hoc Legislative Advocacy Committee, we have seen the bill pass the House of Representatives four times in less than 2 years and come within a hair of the President's desk," Lisenco continued. "Momentum is clearly on our side, and the wind is at our backs. We need our membership's active engagement to provide that final push to propel the Parity Act across the finish line." ARRL Letter 7/26/18

Emergency Preparation

This month's column is about emergency power. I am going to focus on two sources, gas generators and solar. The club and a few club members have purchased the Honda EU2200i which runs about 8 hours on half power on just about a gallon of gas. It has an inverter which provides clean stable power for computer and ham radio equipment at 2000 watts peak. A smaller version the Honda EU1000i is available at 1000 watts peak and .6 gallons of gas for 7 hours at half power. The EU2200i lists at \$1299 and the EU1000i lists at \$949. Now for other options. California has some stringent air quality rules so many of the generators you see for sale online are not available in California. I suggest you shop around at Home Depot, Lowes, Harbor Freight, Costco, and Sam's Club and review the generators you are interested in, on line before purchasing. For many years I had two generators. I got tired of storing gas. So I went solar.

If you went to the July picnic you might have seen Heidi's KG6GGY solar set up. She had Bioenno Power, power pack(BPP-120) and the foldable solar panel(BSP-28). The power pack is rated at 120 watt hours (12 volts at 10 amps) and the solar panel produces 15 to 18 volts at 1.55 amps. Total cost of both items is around \$350.00. GoalZero has the Sherpa 100 power bank. The stats are less impressive. The power bank with a 28 watt solar panel is \$500.00. Harbor Freight has solar panels, charging controllers and other items for sale. If you buy their large panel, battery, charge controller, and connection kit the price is around \$350.00. Personally, I like my Bioenno set up. I have the same setup as Heidi. I also purchased a GoalZero for my parents. Both are easy to charge and easy to plug in consumer items. Mom uses the GoalZero to charge her phone and laptop once a month. That wraps it up. 73

SPOT the INFORMATION

Ed Hinz, KN6JN

Attendance drawing: Glendee KJ6EBS was drawn and was not present . Missed out on \$20.00 Next month the big cash prize will be \$25.00 so plan on attending.

Social lunches: Join us at Hoff's Hut for the 2nd Saturday lunch. Saturday, August 11th at noon for a fun filled time. Get your WAM contacts.

Web site: Our South Bay ARC website is looking great. Plenty of photos to look at of our club members and friends. Please check it out: www.w6sba.org Look at the calendar for updates on our activities and upcoming events. Heidi WG0GGY would like your input as well.

Swap meet: The TRW swap meet is on August 25th. Stop by at our I-26 spot and say hello to the Swap meet gang. Tom KI6RC , Chuck K6CSH and Bill KQ6Z are running the show.

Picnic: The club picnic was a big success. Plenty of hotdogs, food, and ham radio marked the bright and sunny morning. Temperatures in the afternoon stayed mild which many attributed to having a large group of the alumni from the University of Hawaii which certainly brought the trade winds with them. Bruce KK6BJ brought HF gear and worked some side band contacts. Heidi WG0GGY brought her solar powered HF station and worked a number of HT8 contacts. Pictures of the grand picnic are posted on our website www.sbarc.org. A big SBARC thank you to all that planned, assisted and executed this great event.

Holiday Party: It is time to get your ideas together and bring them to the next club meeting. We are exploring ideas for a theme for this year's December celebration. Don't worry we won't put you in charge if you have a great idea. So plan on being creative. Theme includes food, decorations, music, party games, costumes, prizes and whatever you can think of.

CALENDAR

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

Club Meeting - 3rd Thursday of the month
August 16, 2018- 7:30 p.m.

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,
August 25, 2018, 7-11 a.m.

VE Session - Contact: Joe WB6MYD
Phone: (310) 328-0817
jmlanphen@gmail.com or w6sba@arrl.net
(All VE sessions are scheduled for Room 4 in the Health
Conference Center for 2018)

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

CLUB SERVICES

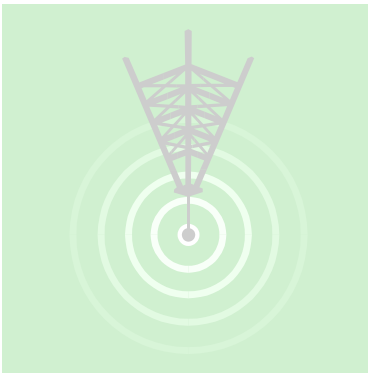
Awards Manager (HF/VHF)	Cliff - K6LH
Health & Welfare	Joe - WB6MYD
Swap Meet Chair	Tom-KI6RC, Chuck- K6CSH., Bill-KQ6Z
VE Test Liaison & Sessions	Betty Barch-N6VZF N6VZF@arrl.net (310) 545-6422
Webmaster	Heidi Stromburg - KG0GGY
Editor	Glenda - KF6QFE Glenda.simpson@hotmail.com
Proofreader	Ray - WA6OWM

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

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

