



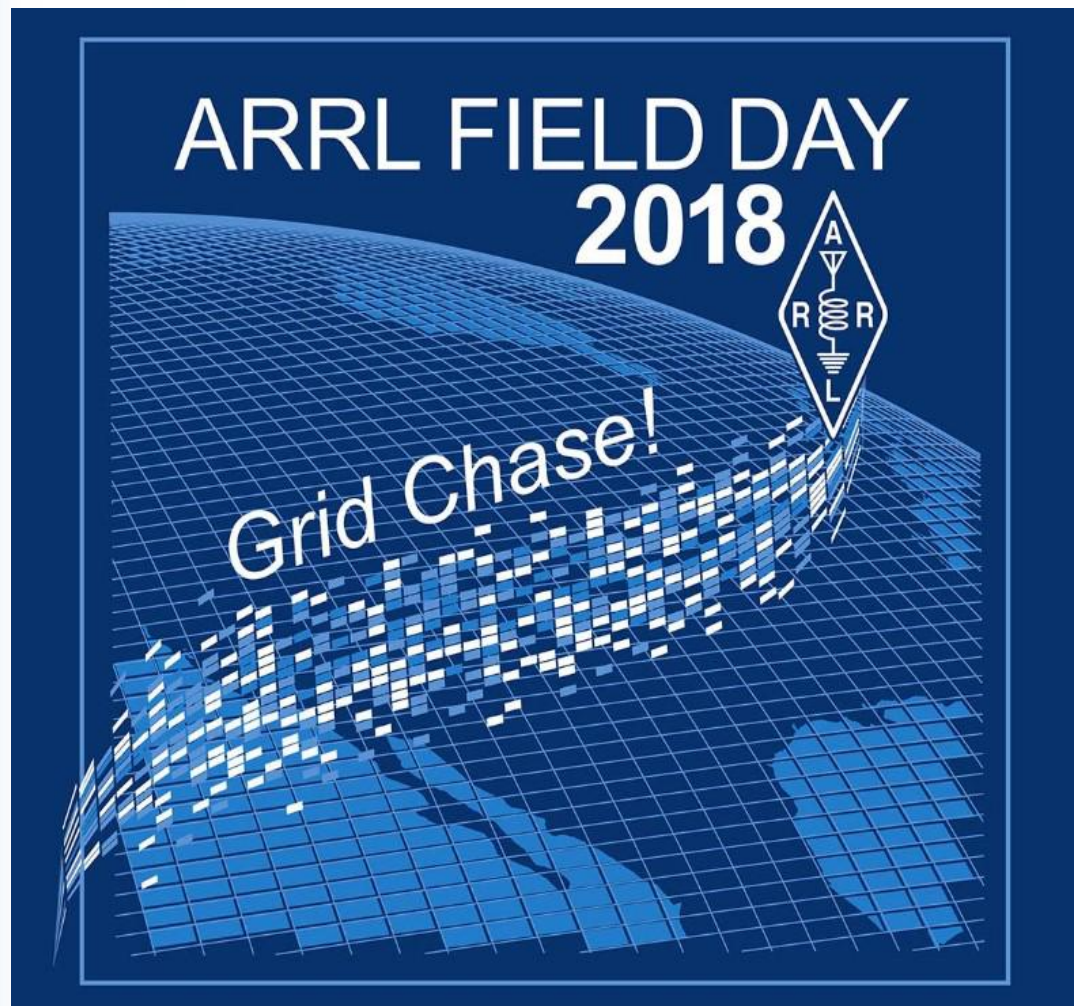
June 2018

# ARCOver

A Community Service Organization Dedicated to Amateur Radio Since 1970

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# June 23rd - 24th

E-mail: [W6SBA@arrl.net](mailto:W6SBA@arrl.net)



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

### Community Service

Our objective as a club is be to of service to our community. For “Ten Days in May” we were in full swing. First we assisted Torrance Amateur Radio Association (TARA) with the Armed Forces Day Parade and on Memorial Day we operated a net between Green Hills Memorial Park and the fly-overs by Aircraft from Torrance Airport. The Torrance Parade celebrated with a tribute to all branches of the Military. The opening ceremonies at Green Hills Memorial Park included musical tributes from Cabar Feidh Bagpipe band, a large Color Guard Procession and a Fallen Solder Tribute. Thank you to all that keep the club repeater clear during these events. Here is a list of club members from both operations:

### Torrance Armed Forces Day Parade – Saturday May 19, 2018

Net Control: Alan Parks KG6ZPL, Joe Lanphen WB6MYD; Division I: Heidi Stromburg KG0GGY, Chuck Hohm K6CSH; Division II: Russell Rainwater KI6HBG, Rob Lefton KB6KMX; Rover: Ray Grace WA6OWM, Jody Wallace W6NLA

### Green Hills Memorial Park Fly-over: May 28, 2018

Coordinator: Chuck Lobb KN6H; Net Control: Joe Lanphen WB6MYD, Jerry Shaw KI6RRD; Torrance Airport: Ken Carr K6HRN, Chuck Hohn; Green Hills: Russell Rainwater KI6HBG, Ray Grace WA6OWM

### Are you prepared or can we use FT8 for FD and ECOMM?

Field day is around the corner and a good exercise to test our capability and availability in times of emergencies. As we near the bottom of the Solar Cycle and band conditions deteriorate, our role in Emergency Communication preparedness increases. Today the demands for rapid and accurate ECOMM can stress our capabilities, and often to the breaking point. There are more demands placed on ECOMM units to deploy and communicate over larger areas with fewer resources, we need to be prepared. In this years Field Day exercise, we will need to utilize more aggressive modes, modes like CW and Digital. We may be comfortable in sending a text message on our cell phone, or maybe a long message using FLDigi and NBEMS messaging system. Why is FT8 vs. CW a logically direction? First we have fewer CW Operators, and second FT8 has an Signal-to-Noise advantages over other modes including CW. The shortcoming of FT8 is the 13-character limitation. Several decades ago the National Traffic System (NTS), a relay option for Amateur Radio traffic developed the “ARL Message Format”. This simplified messages into small and easy to send short blocks of traffic. I feel we can do the same with FT8. At the present time Alex KD6LPA is configuring laptops for Phone, CW/Phone and CW/Phone/Digital operation. Bruce KK6BJ is working on the sound card (ADC) hardware. I've pulled together drivers, software and interface hardware. All this reporting to N3FJP Field Day Logger program.

To get ready for Field Day, WA6OWM will share the “Center-of-Activity Frequencies” list info at our June General meeting . The Field Day site will be on the roof of the west parking structure at Torrance Memorial Medical Center. Pick a band and mode and join us, Friday June 22 for setup, Saturday June 23 for Field Day, end on June 24th. Following FD, we'll pack away what we used, clean the area and head home.

WA6OWM

### < 2018 CLUB OFFICERS >

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

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



# June PRESENTATION

Field Day 2018- the New & Traditional Meet

By Ray WA6OWM, Bruce KK6BJ, and Alan  
KG6ZPL

Field Day 2018 will take place Friday June 22 thru Sunday June 24th and remains The Big Ham Radio Event of the Year.

This is a chance to have great company, fine food, a chance to join almost 40,000 operators from over 2800 clubs as we polish our skill in radio skills in off the grid communication in many modes and get to setup and try out new equipment.

We will give a history of how FD came to be and what it has morphed into as we explain some of our new equipment, more efficient setup, interconnection and software improvements over many years of practice

We will try to answer burning questions such as:

- How can I help?
- How can I make a FT8, PSK or other digital QSO?
- Can I try my rusty CW and practice voice contacts?
- What happened to Abel and Baker and who are Alfa and Bravo?
- Can we make a satellite contact again?
- Will we be in another photo-op with TV and the paper?
- Can I meet an elected official who isn't running for office?
- Can I have second helpings?

Please joins us Thursday June 21, 2018 in room 1 of the Richard Hoffman Auditorium at Torrance Memorial Medical Center at 7:30 PM

Bruce KK6BJ Vice President South Bay  
Amateur Radio Club



1) How many years were there between January 1, 5 BC and January 1, 5 AD?

2) Was the year 1700 a leap year?

3) Jean is my niece said Jack to his sister Jill. Jill replies that Jean is not her niece. Explain how this could be so.

4) In a one-story pink house, there was a pink person, a pink cat, a pink fish, a pink computer, a pink chair, a pink table, a pink telephone, a pink shower – everything was pink! What color were the stairs?

### May 2018 Quiz Answers

1) A man shopping in a pawn shop saw a coin dated 22 BC. He immediately knew that it was a forgery. Why? ***The use of "BC" began after 0 BC.***

2) Out of 3 males and 3 females, 3 people enter a room. What is the probability that there are 2 males and 1 female in the room. ***If you list the possibilities there are 20 ways that 3 people can do it, of these 9 are 2 males and 1 female so the probability is 9/20.***

3) What has a head, a tail, no legs, and is brown?  
***A Penny.***

4) Can you name three consecutive days without using the words Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, or Sunday?  
***Yesterday, today, and tomorrow.***

### Green Hills Memorial Park Memorial Day Fly Over

SBARC supported this event on Memorial Day 2018. SBARC coordinated 3 hams in or near the tower, one ham on a hill with coverage to the tower and Green Hills, and on ham with the announcer at Green Hills. Ray WA6OWM was net control. Chuck Lobb KN6H Ken Carr K6HRN and Chuck Hohn K6CSH were at the tower. Also participating in this fine event were Joe WB6MYD, Russell KI6HBG, Jerry KI6RRD, and Steve KM6EMF. The four WWII era plane flyover turned into a eight plan flyover. Quite a sight to behold. A late breakfast /luncheon was served at Green Hills for those who participated.

## IARU Region 1 Editorial Warns of the Danger of VHF/UHF/Microwave Spectrum Grabs

The chair of the International Amateur Radio Union Region 1 (IARU R1) VHF-UHF- $\mu$ W Committee, Jacques Verleijen, ON4AVJ, has highlighted extant threats to the Amateur Radio spectrum above 30 MHz. In an editorial that heads the latest edition of the IARU R1 VHF-UHF- $\mu$ W Newsletter, issued on May 29, Verleijen invited all IARU member-societies to consider ways to "promote, defend, and use our frequencies."



"They are wanted by others, both government and commercial users," Verleijen wrote. "So, this is a wake-up call to be aware that if we are not using those bands, we will lose them." If that happens, he continued, it won't be the fault of IARU R1, but of the amateur community that "often [has] more commitment to HF" than to VHF and higher bands. Conceding that the HF bands "are the easiest to use," Verleijen said member-societies should think outside the box to come up with ideas to improve VHF, UHF, and microwave activity.

Verleijen said the vast amount of Amateur Radio spectrum from 50 MHz through 5 GHz makes it an attractive target for commercial and governmental interests. He noted that 50 MHz is the focus of a key World Radiocommunication Conference 2019 (WRC-19) agenda item -- specifically, to harmonize the 6-meter allocation across all three ITU Regions.

"It would be unfortunate to see a repeat of the WRC-15 result for 5 MHz, where high hopes and years of hard work actually resulted in a few kilohertz at 15 W [EIRP] max," Verleijen continued. A repeat of that situation on 6 meters could mean a "far more devastating" loss of existing spectrum and future opportunities for digital innovation.

The 2.3 GHz and 3.4 GHz bands are highly sought after for commercial wireless, Verleijen said, pointing out that the UK recently auctioned large segments of 2.3 and 3.4 GHz spectrum once available to Amateur Radio, "threatening significant activities from narrowband/Earth-Moon-Earth to DATV (digital amateur TV)."

Two WRC-19 agenda items affect 5 GHz, focusing on Wi-Fi and so-called "intelligent transport." Amateur Radio, as a secondary service, faces another difficult challenge in this part of the spectrum and

has "little influence over its direction," Verleijen contended. In IARU Region 1, the primary concern is the expansion of Wi-Fi into 5,725 - 5,850 MHz.

"[O]ur preoccupation with traditional or [narrowband] modes does not justify the amount of spectrum," he said, noting that "some activity levels are quite low" outside of contests.

"Ideally, we need genuine open innovation and to show amateurs leading in the 21st century," Verleijen said. "Pressures on amateur bands are nothing new, but we know that the spectrum pressures above are not helped by poor engagement, relationships, or lack of a united approach" in some member-societies, with respect to their administrations. ARRL Letter May 31, 2018

## Solar Eclipse QSO Party Research Results Published in Geophysical Research Letters

The first science results from the Solar Eclipse QSO Party (SEQP) last August 21 have been published in the American Geophysical Union journal Geophysical Research



Letters. In the paper, "Modeling Amateur Radio Soundings of the Ionospheric Response to the 2017 Great American Eclipse," New Jersey Institute of Technology (NJIT) researcher Nathaniel Frissell, W2NAF, and team present Reverse Beacon Network (RBN) observations of the SEQP and compare them with ray tracings through an eclipsed version of the physics-based ionospheric model SAMI3. HamSCI, the Ham Radio Science Citizen Investigation organization, sponsored the event.

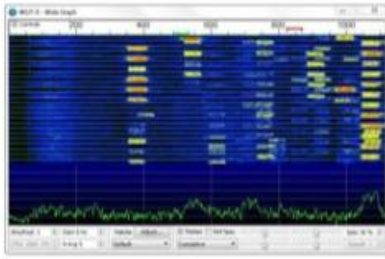
"From a ham radio perspective, this paper very clearly shows the effect of the eclipse on not just a few, but a very large number of contacts," Frissell told ARRL. "You can see from the charts that activity drops off steeply on 20 meters during eclipse totality, while 80 and 160 meters open up. On 40 meters, you can see how the contact distance increases in step with the eclipse."

Frissell said another key aspect of the paper is that the researchers were able to use ray tracing to compare the observations to a physics-based numerical model of the eclipsed ionosphere.

On 20 meters, eclipse effects were observed as a drop off in communications for an hour before and after eclipse maximum. On 40 meters, typical path lengths extended from about 500 kilometers (310 miles) to 1,000 kilometers (620 miles) for 45 minutes before and after eclipse maximum. On 160 meters and 80 meters, eclipse effects were observed as band openings 20 to 45 minutes around eclipse maximum. ARRL Letter, May 24, 2017

## FT8 Activity Bumping Up at Some Expense to Other Modes

Despite largely dismal HF conditions, there is no doubt that the recent FT8 digital protocol has hams on the air. The mode has caught on so quickly that co-developer Joe



Taylor expressed surprise last fall at the rapid uptake of FT8 for making contacts on HF bands. Judging by Logbook of The World (LoTW) data, more than 2.3 million FT8 contacts were uploaded in 1 month -- a net gain of 1.2 million contacts on all modes over the same month last year, ARRL Radiosport Manager Norm Fusaro, W3IZ, said. Over the same period, activity in some of the other modes has declined.

"Year-to-date DXCC applications are up by 11% over the same period last year," Fusaro said. "So far, we have processed 898 Worked All States (WAS) applications -- a 72% increase over the same period last year. Of those applications, 347 -- or 39% -- were FT8 endorsements. Application for VUCC are also up by 33% over 2017."

Fusaro said that while some feel that FT8 is "taking over the world," subsuming all other modes, that's not the case. "Activity in the traditional modes of SSB and CW has decreased only slightly, by 10%," he said. "The real decrease is in RTTY and PSK activity and in the other WSJT-X modes. I believe poor propagation would have cut into SSB and CW activity, regardless of the new mode." Anecdotal reports support Fusaro's hard numbers, with wall-to-wall signals surrounding the FT8 watering holes.

Late last year, Denny Berg, WB9MSM, achieved his goal of completing DXCC using FT8. It took him just 4 months.

"I can tell all of you that this mode is spreading like wildfire throughout all the HF bands," Berg told The Daily DX at the time. He said he was able to work all states on FT8 in about 6 weeks of operating.

Taylor has characterized SSB and CW as "general-purpose modes" that are good for ragchewing, DXing, contesting, disaster communication, and other purposes. On the other hand, he has said, FT8 and the other protocols in the WSJT-X suite are "special-purpose modes," designed for making reliable, error-free contacts using signals that may be too weak to work using more traditional modes -- and sometimes even too far down in the noise even to hear ARRL Letter May 17, 2018

## Amateur Radio Parity Act Language Inserted in National Defense Authorization Act

ARRL has praised the work of US Representatives Joe Courtney (D-CT/2), Vicky Hartzler (R-MO/4), and Mike Rogers (R-AL/3) for their successful efforts in securing language in the FY 2019 National Defense Authorization Act (NDAA) that asks the FCC to grant radio amateurs living in restricted communities the right to install effective outdoor antennas. Text from the proposed Amateur Radio Parity Act (HR 555) formed the basis for the Courtney-Hartzler-Rogers Amendment to the NDAA.



"The bill does entitle each and every Amateur Radio operator living in a deed-restricted community to erect an effective outdoor antenna. Full stop. That is the principal benefit of this legislation," ARRL General Counsel Chris Imlay, W3KD, stressed. "There are tens of thousands of ham radio licensees who now, absent the legislation, cannot erect any outdoor antenna at all. This enables them in the same way PRB-1 has enabled hams to address unreasonably restrictive zoning ordinances during the past 33 years."

Imlay pointed out, though, that certain conditions apply. Prior to erecting an antenna in a deed-restricted community, an applicant for an outdoor antenna may have to apply to the homeowners association (HOA) for prior approval of the particular antenna system proposed by the ham. The Act would not empower an HOA to deny approval of all outdoor antennas. But neither does it entitle radio amateurs residing in deed-restricted subdivisions to erect whatever antennas they want. ARRL Letter, May 17, 2018



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!

## ARRL Asks FCC to Protect Amateur Radio Millimeter-Wave Bands

ARRL has asked the FCC to avoid authorizing developmental technologies in two Amateur Radio bands above 95 GHz that some radio amateurs may be unaware of. ARRL commented on May 2 in response to a Notice of Proposed Rule Making and Order (NPRM&O) in ET Docket 18-21, released in February. The so-called "Spectrum Horizons" proceeding seeks to make the bands above 95 GHz "more readily accessible for new innovative services and technologies." ARRL said that, while it agrees that "regulatory flexibility is justified" in the millimeter-wave bands above 95



GHz, due to the extensive frequency re-use possibilities, the FCC ought to make two primary Amateur/ Amateur Radio Satellite bands in that part of the spectrum unavailable for deployment of unlicensed Part 15 or Part 5 Experimental Spectrum Horizons devices. Amateur Radio has primary allocation status in the bands 134 - 136 GHz and 248 - 250 GHz, both shared with the Radio Astronomy Service, which is secondary.

"The amateur allocations require protection against increases in the noise floor due to aggregate radio frequency devices," ARRL said. "The bands are used ubiquitously and unpredictably, typically, but not always, at high elevations for research and development purposes and propagation studies, for terrestrial point-to-point, satellite, and Earth-Moon-Earth communications experimentation."

ARRL said it would oppose "any proposal to permit unlicensed devices or largely unregulated experimental operations" in the two primary Amateur Radio allocations in the range of spectrum the FCC is considering. "It is critical to preserve for Amateur Radio experimentation the current relatively quiet noise floor, and the positive RF environment that now exists in those two relatively small band segments," ARRL told the FCC. The League's comments noted that the secondary Radio Astronomy Service in those two bands also requires a quiet RF environment.



ARRL said it also would oppose the authorization of Spectrum Horizons experimental authorizations in the two primary Amateur/Amateur Satellite allocations, operating under a new subpart for "Spectrum Horizons Experimental Radio Licenses" in the spectrum at issue.

"Overall, the Commission is on the right track in this proceeding," ARRL allowed.

"Opening the millimeter-wave bands to expanded unlicensed operation is not unreasonable. Some, but not all, of the bands above 95 GHz can be removed from the Part 15 restricted band list without significant concern." But, ARRL concluded, "the Amateur Radio primary allocations at 134 - 136 GHz and 248 - 250 GHz, which are shared with radio astronomy, should be unavailable for either Part 15 operation or for other commercial development." ARRL Letter, May 10, 2018

### Former Orange Section Manager, Veteran ARRL Volunteer Sandi Heyn, WA6WZN, SK

Well-known ARRL stalwart and former Orange Section Manager Sandra Mae "Sandi" Heyn, WA6WZN, of Costa Mesa, California, died on April 28 after a lengthy illness. An ARRL Life Member, she was 75. Sandi Heyn was the wife of ARRL Honorary Vice President and past ARRL Southwestern Division Director Fried Heyn, WA6WZO, who relied on her as his trusted assistant. The couple often appeared together at ARRL and other Amateur Radio functions, and Sandi Heyn nearly always accompanied her husband to ARRL Headquarters for the ARRL Board's twice-yearly meetings during his years as a Director. As Fried Heyn said, "We were joined at the hip." Married for 57 years, the Heyns continued as Amateur Radio ambassadors even after their official League service concluded.

In addition to her service as Orange Section Manager from 1983 until 1985, Sandi Heyn served as a member of the ARRL Planning Committee during ARRL President Vic Clark's, W4KFC, administration, was Orange Section Emergency Coordinator, and president of the Young Ladies Radio League in 1983. She was Orange Section ARRL Affiliated Club Coordinator from 1987 until 2003, and she chaired the Orange County Council of Amateur Radio Organizations in 1991 and the Los Angeles Area Council of Amateur Radio Clubs in 1992. Sandi Heyn received the ARRL Southwestern Division Meritorious Service Award in 2001.

She was also a US Army Military Affiliate Radio Service (MARS) volunteer, a member of several Amateur Radio clubs in California, and was a Quarter Century Wireless Association (QCWA) Life Member. She regularly volunteered at the ARRL booth and in the Amateur Radio reception during the annual National Association of Broadcasters conventions in Las Vegas. She played a significant role in organizing the 1992 ARRL National Convention in Los Angeles.

In accordance with her wishes, Sandi Heyn's body will be donated to science. Services are not planned at this time. ARRL Letter May 3rd

## Amateur Radio Case Attracts Attention of FCC Commissioner

FCC Commissioner Michael O'Rielly has used the latest chapter of an Amateur Radio proceeding to reiterate his call that the Commission abolish its Administrative Law Judge (ALJ) system. The long-standing case involves efforts by William F. Crowell, W6WBJ (ex-N6AYJ), of Diamond Spring, California, to renew his license. Late last week, the FCC denied reconsideration of Crowell's petition to have the Commission assign a new ALJ to his case, arguing that the current ALJ, Richard L. Sippel, is biased against him. Attaching his own comments to a Memorandum and Opinion Order (MO&O) released on April 26, O'Rielly said he approved the Commission's opinion that Crowell's appeal was justifiably denied, but he expressed concern that the ALJ "took unnecessary actions" in Crowell's case and in another unrelated proceeding.

"On a larger scale, complaints about the ALJ process are not isolated incidents, but paint a picture of questionable decisions coupled with an elevated level of inefficiency," O'Rielly said in comments attached to the MO&O. "It seems to me that, too often, the Commission has had to reverse the decisions of the ALJ or address one ALJ decision or another. This reality only reaffirms my call to consider eliminating the ALJ process altogether."

It has been 10 years since the FCC set Crowell's license renewal application for hearing, and nearly as long since Crowell requested disqualification of the ALJ assigned to his case. Crowell's license renewal hearing centered on whether he had violated FCC Part 97 rules by intentionally interfering with and/or otherwise interrupting radio communications, transmitting one-way communications, indecent language, and music, and whether he is qualified to be and remain a Commission licensee and have his renewal application granted.

In 2016, the FCC imposed a \$25,000 fine on Crowell for intentionally interfering with the transmissions of other radio amateurs and transmitting prohibited communications, including music. The penalty included "an upward adjustment reflecting Mr. Crowell's decision to continue his misconduct after being warned that his actions violated the Communications Act and the Commission's rules," the FCC said at the time.

"Mr. Crowell does not deny that he made the transmissions that prompted the fine, but argued, in large part, that those transmissions were protected by the First Amendment," the Forfeiture Order said.

The FCC concluded in this month's MO&O, "We have examined Crowell's claims of bias in accordance with our precedent, a task made more difficult because Crowell provides virtually no detailed factual support or references to the record for his allegations."

FCC Commissioner Michael O'Rielly. Crowell's license, which expired in 2007, has not been renewed, but Crowell may continue to operate while his renewal application is pending. ARRL Letter, May 3, 2018



FCC Commissioner Michael O'Rielly.

## SPOT the INFORMATION

Ed Hinz, KN6JN

### SBARC supports the 59th Annual Torrance Armed Forces Day Parade

An overcast morning that soon turned into a brilliant sunny day, the 59th annual armed forces day parade stated rolling down the streets of Torrance. This year the Grand Marshall of the parade was Major General Eric M. Smith of the United States Marine Corp. In total there were four generals and two admirals in the parade. None of this could have happened without the able assistance of the SBARC members who lined up the 50 units marching or driving in the parade. Net controls Ray WA6OWM and Joe WB6MYD organized the SBARC team. As an operator in years past, I have enjoyed having a front row seat seeing the military equipment, re-enactors and bands. The aviation flyovers are also inspiring. A good time was had by all and hope to see you at next year's parade.

### SBARC PICNIC

The spring picnic was held at De Portola Park. We had 15 SBARC members and assorted guests attend. Bruce KK6BJ and Chuck K6CSH held our spot and set up early. On one table radio gear was set up. There was plenty of radio gear to review. As far as food we had hot dogs and BBQ beef sandwiches. Chuck handled the hot dogs and they were seared to perfection. Join us for the next picnic coming soon.

### Emergency Preparation

This month column is about cooking in a disaster where the gas and electricity has been turned off. There are many options for cooking outdoors. BBQs both charcoal and propane, contained wood fires with a grate, a solar oven or even a charcoal starter as a stove all can do the job. Camping stoves, white gas or propane, are a good item to have in your preparedness inventory. In doors you might look into the small butane stoves that I use at field day. Small, compact, inexpensive, they are available at cooking or party supply stores and Asian markets. When cooking indoors be respectful of any damage to structures or gas leaks. It is important to have cooking items and utensils that can handle the heat of a wood fire if that is your go-to option. Plastic utensils are out. Next month more on cooking food.

## CALENDAR

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

**Club Meeting** - 3rd Thursday of the month  
**June 21, 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,  
**June 30 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

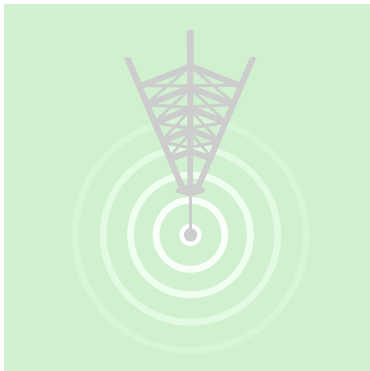
Awards Manager (HF/VHF)	Cliff - K6LH
Health & Welfare	Joe - WB6MYD
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**South Bay Amateur Radio Club Repeater**  
**224.38 MHz · PL - 192.8 Hz Offset -1.6 MHz**  
(See Calendar for Weekly Net Times)

## NEWSLETTER SUBMISSION

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TO:



Address Correction Requested

*A COMMUNITY SERVICE ORGANIZATION*

W6SBA

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