W6SBA SOUTH BAY AMATEUR RADIO CLUB

SPECIAL SERVICE CLUB

# ARCOver

July 2018

A Community Service Organization Dedicated to Amateur Radio Since 1970

***In this issue:***



STILL THE LAND OF THE FREE

HAPPY BIRTHDAY AMERICA!

E-mail: W6SBA@arrl.net

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Website: http://www.w6sba.org

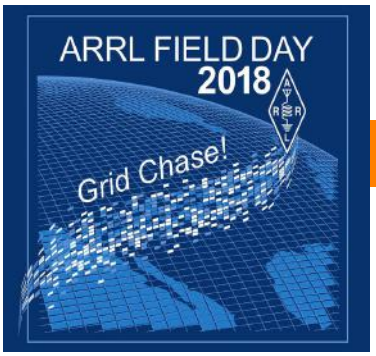
Presidents Report July 2018

Greetings from Wyoming. Thanks to all the members and guests that operated at this years Field Day. This year with less than optimal propagation, while still able to improve over last years score. Here are the totals submitted to the ARRL and which should appear in the December 2018 QST along with our earned Bonus Points. Total: 253 CW, 35 DIG, 133 PHONE. The break down by station/mode, VHF 53 Contacts, HF 80 - PH, 35 - Digital, 253 - CW, Satellite: 1 contact. The East Coast had propagation on the higher bands and 6 Meters, while the west of the Rockies suffered from poor band conditions. Our Satellite contact was with our close neighbor W6TRW. Digital contacts included modes PSK and WSJT-X FT8. Again thanks to all that operated and to the setup crew during Field Day. Food was great too, thanks to Blair's (Ed's XYL) great crew.

Upcoming events that will help improve our operating skills includes the California QSO Party (CQP) and BSA Jamboree-On-The-Air in October. Between now and October will be other events that will improve operating skills and knowledge. Time to stay active and prepare for next year.

Stay active and CW Forever.

WA6OWM




California QSO Party


## < 2018 CLUB OFFICERS >

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**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


# PRESENTATION

Near Space Balloonery

A series of notable experiments and learning opportunities.

Tom KI6RC and Bruce KK6BJ have been members of the South Bay Amateur Radio Club for many years and share a deep interest in ham radio related space projects.
After Tom started a simple club project making handheld Yagi antennas that could make satellite contacts, our interest in space projects blossomed.

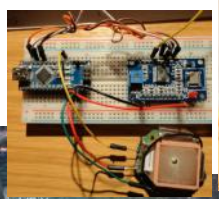
Lacking funding or access to launch our own satellites, we decided to research and see what we could do to investigate the applications of amateur radio in near space balloon flights.

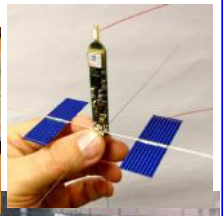
This lead to a series of very interesting experiments ranging from acquisition of lifting gas, building and maintaining various payloads and expendable launch vehicles, investigation of local geography, high altitude wind conditions, radio propagation, FAA rules & regulations, jurisprudence and occasional opportunities to interact with large bodies of water.

We will review what has occasionally gone right the first time, opportunities for improvement the next time and how interesting things are when seemingly simple things become very complicated.

Please join us at 7:30 PM on Thursday the 19th of July in the Richard A Hoffman Conference Center Torrance Memorial Medical Center.

Bruce kk6bj
Tom ki6rc






# CORNER

WITH ALAN, KG6ZPL

1) If I have 3 dimes, 3 nickels, and 3 quarters, how many ways can I make change for a dollar?

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.

3) What has a head, a tail, is brown, and has no legs?

4) What did Mrs. Claus say to Santa when she looked up in the sky?

**June Answers**

1) How many years were there between January 1, 5BC and January 1, 5 AD?
***9 years, AD1 follows immediately after 1 BC.***

2) Was the tear 1700 a leap year?
***No, only centuries divisible by 400 such as 1600 or 2000 are leap years.***

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

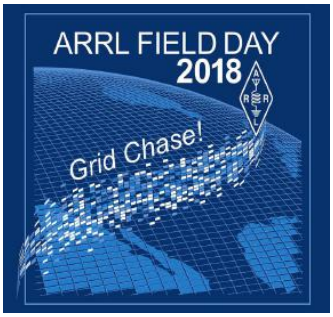
Please send answers, comments, etc., to Alan at thermic72@sbcglobal.net


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!

## W6SBA Field Day Totals

Operating Period: 2018/06/23 18:02 - 2018/06/24 18:00; Total Contacts by Band and Mode:

| Band | CW | Power | Dig | Power | Phone | Power | Total | % |
|---|---|---|---|---|---|---|---|---|
| 80 | 1 | 150 | 0 | 150 | 1 | 150 | 2 | 0 |
| 40 | 250 | 150 | 2 | 150 | 30 | 150 | 282 | 68 |
| 20 | 2 | 150 | 33 | 150 | 40 | 150 | 75 | 18 |
| 15 | 0 | 150 | 0 | 150 | 3 | 150 | 3 | 1 |
| 6 | 0 | 150 | 0 | 150 | 32 | 150 | 32 | 8 |
| 2 | 0 | 150 | 0 | 150 | 16 | 150 | 16 | 4 |
| 1.25 | 0 | 150 | 0 | 150 | 4 | 150 | 4 | 1 |
| 70 | 0 | 150 | 0 | 150 | 1 | 150 | 1 | 0 |
| **GOTA:** | 0 | 150 | 0 | 150 | 0 | 150 | 0 | 0 |
| **Total:** | **253** | | **35** | | **127** | | **415** | **100** |




QSO Points = 703

Power Multiplier = 2

Total Score = 1406

Bonus Claimed = 1050

<ARRL will add to total score>

**Field Day June 23, 24, 2018 SBARC —** Chuck, K6CSH

This year the South Bay Amateur Radio Club's Field Day activities began at 2:30 on 6/22/2018, the Friday afternoon before it started. We met at Joe's QTH to load 2 trucks and 2 SUVs with antennas and support hardware. We had masts, antennas, tools and hardware to haul to the Field Day site on top of the Torrance Memorial Medical Center west parking structure. We had about 6 members to help load up and transport everything.

We arrived at the top of the hospital parking structure by the 4:00 PM planned time. After unloading, we set up 2 masts with the HF verticals on top. We then put up 3 masts with the UHF, VHF and 50 meter hardware. After that we put up inverted V antennas on the lamp posts on the west side of the parking structure. All in all we put up 9 antennas on Friday evening. We were done by 8:30 PM and headed home to get some rest.

Saturday morning we were back at 7:30 AM for the final assembly of the equipment. We fired up a gas generator to power the coffee pot (first order of the day). Donuts were on the menu also. We located and fueled up 2 more generators to power the radios and computers, etc. Then we brought up 25 tables and 50 chairs from the hospital and set them up. We set up eating and R&R tables, coffee and snack table and 1 for the education booth.

We set up 2 areas for the HF stations, each one housed in its own EZ-Up to keep the wind and sun out. We set up a UHF/VHF station under its antennas to the south side of our area. The computer network was set up by Alex with workstations at each radio location. This year we added a large monitoring screen between the stations to display the score as contacts were recorded. One display option was a map of the US with the states being colored in as they were contacted.
Another interesting piece of hardware was a stationary bicycle driving a 12 volt DC generator. Visitors could peddle the bicycle to generate electricity. They could then increase the electrical load by turning on one light bulb at a time. This allowed them to feel the effect on their legs as the electrical load is increased. There is quite an effort required to light up all 5 bulbs.

We were ready to go by the time Field Day started at 11:00 AM PDT. We started making contacts immediately around the country. Several stations come on the air at that time and the contacts were abundant.

At lunch time we had sandwiches with chips and sodas. For dinner we had lasagna, salad, and bread, all prepared by Ed and his XYL. It was all excellent. We continued to operate and make contacts into the evening but the attending membership thinned down near midnight.

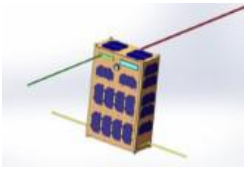
Ray and others spent the night making contacts on CW and digital modes, and they kept us operating around the clock. I lasted until about 8:30 PM and then went home for a good night's sleep. I returned about 7:30 AM, in time for a breakfast of a made-to-order omelets and flap jacks with all the fixings. Ed's special bacon technique is delicious.

Operations continued until 11:00 AM when Field Day officially ended. We ceased operations and immediately started the breakdown efforts. Alex shut down the computer network and saved the data files before stowing the PCs and network hardware. We broke down the tables, chairs, EZ-Ups and all equipment in the operations area. The tables and chairs were returned to the hospital meeting rooms.
Next, on the top deck of the structure, we tore down the masts and antennas, broke down the power setup of electrical generators and stowed the power cords and coax. After everything was packed, we loaded up the trucks. Most of the hardware was delivered back to Joe's QTH and stored for our next event.

I feel that we had a very successful Field Day with much comradery and good times enjoyed by all who participated. Much was learned about radio operating in the field and a few of the newer hams got a good look at how the old-timers setup and operate. I personally had the opportunity to dig a bit deeper into the filtering options of the HF rigs, adding to my ability to pull out hard-to-hear stations. Everyone pitched in for each phase of the effort and pulled it off without a hitch. I didn't name many names in this write-up but you know who you are. I would like to say thanks to everyone who pitched if for the setup, operation, and tear down of everything for the weekend. I have to say it made for an excellent Field Day experience.

Details of the number of contacts made, points scored and persons involved will be available as they are tabulated in the coming weeks.

## CAMSAT Offers More Details on New Satellites, One Carrying HF Transponders



CAMSAT, China's Amateur Radio Satellite organization, has offered additional details about the three Amateur Radio satellites it plans to launch later this year. Two of the satellites, designated CAS-5A and CAS-6, will carry transponders, and one of them will offer HF capability.

CAMSAT's Alan Kung, BA1DU, told ARRL that the 6U CAS-5A will carry two HF transponders and two V/UHF transponders. The plentiful equipment package includes an H/T (21/29 MHz) mode linear transponder, an H/U (21/435 MHz) mode linear transponder, an HF CW telemetry beacon, a V/U linear transponder, a V/U FM transponder, a UHF CW telemetry beacon, and UHF AX.25 4.8k/9.6k baud GMSK telemetry.

* The H/T mode linear transponder will have a 30 kHz wide uplink centered on 21.400 MHz, and a downlink centered on 29.490 MHz. RF output is 0.5 W.

* An HF CW telemetry beacon will transmit on 29.465 MHz with 0.1 W.

* The H/U mode linear transponder will have a 15 kHz wide uplink centered on 21.435 MHz, and a downlink centered on 435.505 MHz. The RF output is 0.5 W.

* The V/U mode linear transponder will have a 30 kHz wide uplink at 145.820 MHz, and a downlink at 435.540 MHz. The RF output is 0.5 W

* The V/U mode FM transponder will uplink at 145.925 MHz, and downlink at 435.600 MHz. The transponder passband is 15 kHz, and the RF output is 0.5 W.

* The UHF CW telemetry beacon will transmit on 435.570 MHz, with an RF output of 0.1 W.

* UHF AX.25 4.8k/9.6k baud GMSK telemetry will transmit on 435.650 MHz at 0.5 W.

Kung told ARRL that the HF, VHF, and UHF antennas are quarter-wave monopoles.

A satellite within a satellite, the tiny CAS-5B, weighing 0.5 kilogram, will be deployed from CAS-5A in orbit. It will carry a UHF CW beacon on an Amateur Radio frequency. CAS-5A will launch from the Jiuquan Satellite Launch Center in late September.

*(Continued at the top right column)*

Set to be launched at sea, the 50-kilogram CAS-6 microsat will include a VHF CW telemetry beacon, a U/V mode 20 kHz linear Artist's rendering of the CAS-5A satellite. [Image courtesy of CAMSAT]
Amateur Radio transponder, and AX.25 4.8k baud GMSK telemetry. It will also carry an atmospheric wind detector and other systems that will operate on non-amateur frequencies. ARRL Letter 6/14/2018

## FCC Denies Petition Aimed at Preventing Interference from Digital Repeaters to Analog Repeaters

The FCC has turned away a Petition for Rulemaking from a Michigan radio amateur that asked the Commission to amend Section 97.205 of the Amateur Service rules to ensure that repeaters using digital communication protocols do not interfere with analog repeaters. Charles P. Adkins, K8CPA, of Lincoln Park, had specifically requested that discrete analog and digital repeaters be separated either by distance or frequency and that digital repeaters be limited to 10 W output, the FCC recounted in its June 1 denial letter, released over the signature of Scot Stone, the deputy chief of the Wireless Telecommunications Bureau's Mobility Division. According to the letter, Adkins had characterized digital repeaters as "a major annoyance" to analog repeater operators.

"In 2008, we rejected a suggestion to amend Section 97.205(b) to designate separate spectrum for digital repeaters in order to segregate digital and analog communications," the FCC said in its letter to Adkins. "We noted that when the Commission has previously addressed the issue of interference between amateur stations engaging in different operating activities, it has declined to revise the rules to limit a frequency segment to one emission type in order to prevent interference to the operating activities of other Amateur Radio Service licensees."

The FCC told Adkins that current Part 97 rules already address the subject of interference between amateur stations, prohibiting, among other things, willful or malicious interference to any radio communication or signal, and spelling out how interference disputes between repeaters should be handled. ARRL Letter, 6/6/2018

## WAM contest, the 3rd Quarter rules


We've started the 3rd quarter of the WAM contest. Here are the rules

1. Work SBARC Club member for one (1) point. For additional points work the same member on a different mode or band.

2. W6SBA repeater contacts count as five (5) points. A question has come up about contacts during the SBARC Net (Thursdays at 7:30 p.m.). WAM contacts should be encouraged during the net but should occur after the official net is concluded.

3. Eyeball contacts will count as two (2) points. Contacts for each member at different locations will be an additional two (2) points. You can only have one contact for the swap meet, one for the club meeting, one for the picnic, etc. during the quarter.

Be aware, multiple contacts for the same member on the same mode or band will not count as additional contacts. So there you have it. Turn in your logs for the 2nd quarter on or before the July 19, 2018 meeting.

If you have any questions and need clarification, please contact Ed-KN6JN at kn6jn@aol.com

Good luck in the contest!

## Emergency Preparation


This month's column is about what food to store in case of emergency. According to FEMA you will want to plan for a two week disruption of the food supply. Have food you enjoy and are also high in calories and nutrition. The food you store in your kitchen can be taken into account for your food storage plan. You should store the necessary water for drinking, hygiene and cooking of your food.

FEMA web site https://www.ready.gov/food and https://www.fema.gov/pdf/library/f&web.pdf for further information.

I suggest making a budget for buying supplies and add a few items a month. Remember to rotate your supplies and check expiration dates.

**Hobo Packets**:2-3 steaks about 2 pounds) olive oil, 1 small onion, diced,2 large russet potatoes 1" dice,2 cloves garlic, minced,8 tbsp. butter,salt & pepper to taste Directions: 4 large squares of foil. Make a mountain! In each square 1 oz butter ½ of a Potato diced, then some onion, garlic then ¼ of the meat, salt and pepper to taste. 1 oz of butter on top. Seal and cook on grill medium heat for 35-45 minutes. Check for doneness towards the end. Watch out for hot steam! Also works with ground beef and you can add other vegetables. Enjoy! Ed, KN6JN

## Reverse Beacon Network Beta Testing Separate Spot Stream for FT8

The popular Reverse Beacon Network (RBN) has announced that it's now offering -- as a beta test -- a separate telnet feed for FT8 spots (telnet.reversebeacon.net port 7001), in addition to the current spot feed (telnet.reversebeacon.net port 7000), which will be repurposed to handle only CW and RTTY spots. In addition, a beta version of Aggregator Version 5 that can handle FT8 spots received from WSJT-X will be available on the RBN website, with instructions on how RBN node operators can configure their nodes to spot FT8 call signs on one or more bands; this will not interfere with the ability to spot CW and RTTY call signs, the RBN team assured in its announcement, explaining its reasoning for the move. The beta test follows a limited alpha test aimed at getting a feel for the spot load and other implications of carrying FT8 spots on the RBN.

"The most striking characteristic of FT8 spots is their sheer quantity," the RBN announcement said, citing weekday statistics from May 23 and 24 when FT8 spots represented 86% and 87% of all spots, respectively, while CW spots were 13% and 14%, respectively, and RTTY spots were below 1%. Throughput on both days totaled some 30,000 spots.

"Whether due to the startling popularity of the new mode, or to the ability to spot stations at 22 dB below the noise level, it seems obvious that adding FT8 spots to our spot flow could have a huge impact on the infrastructure of the RBN," the RBN announcement said. "These numbers suggest that if only 20 - 30 RBN nodes added FT8 spots, those spots could outnumber the total CW and RTTY spots being delivered by the 140 - 150 nodes currently active on the network, doubling the total required throughput."

The RBN team said it wanted to find out whether RBN servers would be up to the task before the fall contest season. ARRL Letter 6/14/2018

## ARRL Drone Transmitters Complaint Spurs Proposed $2.8 Million FCC Penalty

In the wake of an investigation resulting from a 2017 ARRL complaint, the FCC has proposed fining HobbyKing and associated entities $2.8 million for apparently marketing noncompliant RF devices and failing to comply with Commission orders. According to a June 5 FCC Notice of Apparent Liability (NAL), HobbyKing appears to have sold audio/video (A/V) transmitters intended for use with unmanned aircraft, such as drones, in some instances marketing them as Amateur Radio equipment.

"The Enforcement Bureau previously issued a Citation notifying HobbyKing of its legal and regulatory obligations and ordering it to cease and desist from marketing noncompliant equipment," the FCC said in the NAL. "Additionally, the Bureau issued a Citation against HobbyKing for failing to fully respond to a Letter of Inquiry.Despite these Citations, HobbyKing has continued its apparently unlawful practices." HobbyKing had denied that it was marketing its drone transmitters to US customers, but ARRL's January 2017 complaint pointed out that ARRL Laboratory Manager Ed Hare, W1RFI, was able to purchase two drone transmitters from HobbyKing and have them shipped to a US address for testing in the Lab.

In his 2017 letter to the FCC Spectrum Enforcement Division, ARRL General Counsel Chris Imlay, W3KD, described the transmitters as "blatantly illegal at multiple levels," and noted that they used frequencies intended for navigational aids, air traffic control radar, air route surveillance radars, and global positioning systems and not Amateur Radio frequencies, as the marketer had purported.

ARRL told the Enforcement Bureau in 2017 that the devices "represent a real and dangerous threat to the safety of flight, especially when operated from a drone platform that can be hundreds of feet in the air." Hare and ARRL Lab staffers Mike Gruber, W1MG and Bob Allison, WB1GCM, tested the units. Imlay credited ARRL Central Division Director Kermit Carlson, W9XA, and the Electromagnetic Compatibility Committee he chairs, for calling attention to the issue and prompting ARRL's action. ARRL Letter 6/6/2018

## SPOT the INFORMATION

Ed Hinz, KN6JN

**Attendance drawing**: Rick K6RTS call sign was drawn and was present . Big cash prize of $25.00 to Rick. Next month the prize will be $20.00.

**Social lunches**: Join us at Hoff's Hut for the 2nd Saturday lunch. Saturday, July 14th at noon for a fun filled time. Get your WAM contacts early in the quarter.

**Web site**: Our South Bay ARC website is looking great. Please check it out: www.w6sba.org Look at the calendar to keep updated on our activities and upcoming events. While you do not have to log in to see a number of things it would be nice to have you log in also. Make up the usual username and password as you would for any other web- site and you will be privy to all the club information. Heidi WG0GGY would like your input as well. Thank you Heidi for the excellent work!

**Swap meet**: The TRW swap meet is on July 28th. Stop by at our I-26 spot and say hello to the Swap meet gang. We now have Tom KI6RC and Chuck K6CSH and Bill KQ6Z running shop for us. Thanks guys!

**Picnic July 21**: The club is having a picnic / BBQ / Ham-in-the-park day Saturday, July 21, 2018 (11:00 to 2:00) at De Portola Park 25615 Lazy Meadow Dr just off of Crenshaw Blvd. and Rolling Hills road. We will have the usual hot dogs, chips and drinks. You are also welcome to bring your own meat and share the grill, or anything else you care to eat. Bruce plans on hiding his UHF fox for you to locate, so bring your HT and test your skill. We will have the usual HF rig setup but feel free to bring your own transmitter, antenna, power supply or other hardware to show off. The weather is forecast to be great so bring family and friends for a pleasant time. The food should be hot and ready to eat at noon, but come early, 9:30 to10:30, and help set-up and enjoy the day in the park with friends. 73 and see you there.

**Raffle Prizes**: We have had some great raffle prizes this year. Thanks to Alan, KG6ZPL, for purchasing the prizes and everyone for buying the tickets. If you have anything sitting around you would like to donate as a prize, bring it to the next meeting.

## CALENDAR

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

**Club Meeting** - 3rd Thursday of the month
**July 19, 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,**
**July 28 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<br>N6VZF@arrl.net<br>(310) 545-6422 |
| Webmaster | Heidi Stromburg - KG0GGY |
| Editor | Glenda - KF6QFE<br>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**

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