



October 2018

ARCO *vet*

A Community Service Organization Dedicated to Amateur Radio Since 1970

In this issue:

- ◆ President's Message
- ◆ October Meeting
- ◆ 2018 Club Officers
- ◆ Microcosm Visit
- ◆ Some Halloween Trivia
- ◆ Quiz Corner
- ◆ Emergency Prep
- ◆ New Beta Version Boasts Major Changes
- ◆ Two 40-Meter Broadcast Intruders Gone
- ◆ US ARDF Team Tops Its Own World Championship
- ◆ Radio Amateurs Receive Images
- ◆ The Information Spot



E-mail: W6SBA@arrl.net



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

President's Message

Ray, WA6OWM

It is time for a new slant of Club Officers. This year we will lose three or more Officers that have chosen not to run, including myself. That is half of the Council. Not having positions filled means we will not have a club. If you want the club to continue, as an Amateur Radio Club, we must become much more radio active and need to seriously consider accepting a Council position. Contact a Council member and ask that person to place your name as a candidate to save the club. Council members are listed in the ARCOVER. For a stronger club, it would be best to have several candidates for each position. Please choose to become an Officer.

Our charter is to support the Amateur Radio and the Community, which includes the Boy Scouts. This October is the annual Jamboree-on-the-Air (JOTA). We had two members that signed up for JOTA. Far from what we need to support 30-60 Scouts interested in the Radio Merit Badge and Amateur Radio. The idea is to contact other Scout stations and allow as many Scouts as possible to talk to other Scouts and learn about who they are and what they are doing. You might think about counting the Scouts on both sides of the QSO rather than the number of QSOs! This is an opportunity for us to share our knowledge with the Scouts. JOTA is scheduled for October 20 from 8:00AM to 6:00PM. The location is Carrillo Youth Center, 3000 Shoshonean Rd., San Pedro. For more info, url: "k2bsa.net"

November's schedule will include elections and the "Do-it-yourself" night. DIY night gives all members a chance to show off the electronics to club members. This includes completed kits, home brew stuff, new accessories added this year, or maybe a balloon or two! Judging will be in two categories of technical merit, home brew and kit. Home brew means you started with a schematic and parts from your junk box or from a kit or commercial purchase. Judging will be by the members present and by Alan KG6ZPL.

Remember, become an officer in your club and please participate with us at JOTA.



PRESENTATION

October Speaker South Bay Amateur Radio Club David L Guder AI6OU

David became interested in radio normal sailing around channel islands as a kid. He became interested in amateur radio through work.

He works with Southern California Edison in the real estate department, managing a portion of the real estate development.

The utility helps sponsor and maintaining a series of linked 220 MHz repeat years and services backup to other communication frequencies.

He is also active as a CERT member and communicator in his city of Newport Beach. He has a long commute and enjoys mobile radio, satellites, and many other activities. He will be discussing electrical safety and will be open to questions

Please join us at 7:30 PM on 18 October in room one of the Richard Hoffman Memorial Auditorium Torrance Memorial Medical Center

< 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

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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

Microcosm, Inc. Tour October 6, 2018.

As we had gathered in the parking lot from the Microcosm facility just before 10:00am we were greeted by Dr. James Wertz and taken inside the facility's Conference



Room for a briefing. All 13 of us were comfortably seated with drinks in nice chairs to hear Jim, as he introduced himself to us, by given a short history on the Company Microcosm, Inc. which are really 3 different companies all rolled into one.

The mission of the company is to find methods for achieving dramatic reductions in space mission cost. A model of a space module which in this case a camera and lens as an display on the end of this table was used to make these points. It was mainly made of composite material for weight reduction and to fly at an elliptical orbit of about 400 miles above us. It was interesting to see what all goes into something like this including the batteries used and also the solar panel. The components used to control all the must do items are miniaturized, again for weight reduction, with the controlling items to move the lens and mirror are so technically advanced they been found to do a fantastic job.

After the briefing we were taken into the main floor where there was a complete rocket assembly with its fuel tanks attached, as if ready to take off. This was not on a crane or elaborate stand and yet capable of doing the job for these kinds of missions. The fuel tanks are made at the facility from the looks of things and go through processes to reduce weight as well.

This was a very impressive tour; the main thing was that through the use of innovative engineering techniques and a motivated employee group of people and leadership things are being accomplished. Accomplished with the use of smaller launch vehicles for their spacecraft, lower orbits and using existing resources and thereby eliminating the large work forces needed to control the system. Reducing the work force to one shift in a 40 hour work week is capable of reducing the cost tremendously.

Fantastic philosophy making all this such an upcoming resource for so many new and innovative techniques needed for present and future space missions at reduced cost.

Thank you Dr. James Wertz, CEO of Microcosm, Inc. and Bruce-KK6BJ, for making this opportunity possible for us all. This was the best field trip ever. Joe, WB6MY



CORNER

WITH ALAN, KG6ZPL

- 1) Find the 5th term in the following series:
77, 49, 36, 18, ...
- 2) List the states bordering the most other states.
How many and which ones?
- 3) How much dirt does a hole 2 feet long, 1 meter wide, and 57 millimeters deep contain?
- 4) Mark, Guy, and Jane are the officers of a Ham club. The treasurer is a single child. Mark dates Jane's sister and does more work for the club than the president. The treasurer has little to do. The officers are president, treasurer, and secretary. What office does each person hold?

September 2018 Quiz Answers

- 1) There is a round cake. What is the maximum number of equal sized pieces into which you can cut the cake by making only three straight cuts of your knife and without moving any of the pieces?
Eight. Cut straight through a diameter of the cake. Then slice another diameter at right angles to the first cut. Then slice horizontally through the vertical center of the cake yielding eight pieces.
- 2) What is the maximum number of sections into which you can cut a circle by drawing four straight lines through it?
Imagine the circle as a clock face. Draw a line from the 12 to the 6, the 2 to the 7, the 3 to the 9, and from the 5 to a point between the 11 and the 12. The result is 11 sections.
- 3) ***16, 06, 68, 88, ?, 98*** What number is the ?
87. The numbers, when read upside down, are the numbers 86 – 91.
- 4) I am the first in Earth and the second in Heaven, I appear twice in a week though you can only see me once in a year. What am I? ***The letter "e".***

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

Scouting's 2018 Jamboree on the Air Set for October 19 - 21

Scouting organizations are still registering to participate in the 2018 Jamboree on the Air (JOTA) over the October 19 - 21 week-end. With about 1 month to go, JOTA Coordinator Jim Wilson, K5ND, told ARRL that registration is "probably on target" at this point. US registrations stood at 235 as of the end of last week.

Right after JOTA 2017, 489 US locations had signed up, although that included both Jamboree on the Air and Jamboree on the Internet (JOTI) participants, which, Wilson said, the Boy Scouts of America (BSA) have "remained steadfast" in considering JOTA and JOTI as separate events, although, he noted, this is not the case at the world level.

"Our goals are primarily to grow participation," Wilson told ARRL. "The World JOTA-JOTI Team has set a goal of 3 million participants by 2021; 2017 saw 1.5 million worldwide. Sign-ups at the world level right now are at 1,428 locations. Wilson said that, in the US, many locations wait until the last minute to register their participation. In 2017, some 7,900 Scouts took part in JOTA, down by nearly 10,800 participants from 2016, but topping participation for 2014 and 2015. Total radio contact numbers were down from 2016 and 2015.

"We've also put in place a number of aids to help people improve their on-the-air experience, which will be challenging without sunspots," Wilson pointed out. "We've provided a video of how to work HF for JOTA. We've also provided a quick reference card to help Scouts during the QSO." Recommended JOTA frequencies are listed on the K2BSA website. "Operators should note that these frequencies are starting points to find QSOs," Wilson added. "They can also turn the dial to find other stations on the air. It's not like a repeater." A list of Girl Scout activities supported by JOTA-JOTI has also been posted.

Held each year on the third full weekend in October, JOTA is the world's largest Scouting event. JOTA uses Amateur Radio to link Scouts and hams around the world. Scouts of any age and gender can participate, from Cub Scouts to Boy Scouts and Venturers.

Radio amateurs at the local level are encouraged to work with a scout council or unit to set up a JOTA station or arrange to have Scouts visit their shacks. "You can also participate just by making QSOs with the many JOTA stations that will be on the air," Wilson said. ARRL Letter, 9/27/2018



"Get Your Park ON" Operating Event Set for October

What is hoped will be the first annual "Get Your Park ON" operating event will take place October 14 - 20, in celebration of Earth Science Week. The event is open to Amateur Radio operators around the world and is sponsored by the national affiliates of World Wide Flora and Fauna (WWFF), which encourages radio amateurs to operate outdoors in protected nature parks.

During this on-the-air celebration, hams can participate in one of two ways. North American hams can opt to be Activators, setting up and operating in geological and nature centers, such as national and state parks and forests, national monuments, and protected nature habitats. They also may decide to be Hunters, operating from home and searching out and making contact with the Activators.



"We are trying to have parks activated in all states of the USA and Mexico and all Provinces of Canada," the sponsor's Facebook page notes. "Let's have some fun." The week-long special event is reminiscent of ARRL's popular National Parks on the Air (NPOTA) event in 2016, but extends to a larger set of national treasures beyond those managed by the National Parks Service.

In October 1998, the American Geosciences Institute organized Earth Science Week, a national and international event to help the public gain a better understanding and appreciation for the Earth sciences and to encourage stewardship of the Earth, a common goal shared by WWFF. Both programs encourage participants to get outside and enjoy nature.

"Get Your Park ON" begins at 0000 UTC on October 14 and continues through 2359 UTC on October 20. Visit the "Get Your Park ON" Facebook page for more. ARRL Letter, 9/20/2018

Emergency Preparedness

By Ed Hinz, KN6JN



ARE YOU PREPARED?

Here is an article on the use of the Honda EU2200I generator during hurricane Florence. <https://www.popularmechanics.com/home/tools/a23281818/honda-eu2200i-generator/> Since this is a generator that our club uses and some of our club members have purchased, I thought it was timely. Takeaways from the article. 1. Clean power, quite, and use less fuel than your standard generator. 2. Do a power assessment before buying a generator; figure out what you need to run and buy the generator that will power it. 3. Take safety measures so that your house does not fill with carbon monoxide gas. 4. Take safety measure when filling you generator with gas and when shutting down. If you are interested in purchasing this or any other generator please talk to one of our club members who has one and discuss the pros and cons of all aspects of having one.

If you haven't started on your earthquake or disaster kit yet, please go to the store tomorrow and buy a case of water. Next month buy another case. It is a start. A gallon a day per person per day plus more for pets for five days is the minimum. I would say more especially if you want to cook, want some coffee or have neighbors that have not put any away.

New Beta Version WSJT-X 2.0 Boasts Major Changes

As promised, the WSJT-X Development Group has announced a new "candidate release," WSJT-X 2.0 rc1. This beta version of the popular digital mode suite incorporates many new FT8 and MSK144 features that will be of particular interest to the Amateur Radio contesting community. It includes all FT8 DXpedition Mode changes already developed in WSJT-X 1.9.1.



"Enhancements to the FT8 decoder ensure that in most situations decoding sensitivity is slightly better than for the old protocol. Symbol rates and occupied bandwidths are the same as before, and false-decode rates are significantly lower," the user notes explain. "The decoding threshold for MSK144 is a fraction of a decibel higher than before, owing to the slightly larger message payload and higher code rate." WSJT-X 2.0 introduces no significant changes to the JT4, JT9, JT65, QRA64, ISCAT, Echo, or FreqCal protocols. The new features are summarized on the WSJT-X website and in the Quick-Start

Guide to WSJT-X 2.0. Contest-related changes include:

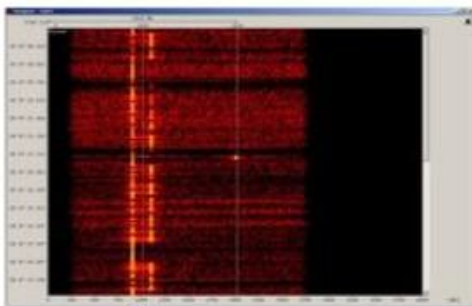
- Support for standard ARRL Field Day exchanges, such as 6A SNJ.
- Better support for North American VHF contests, with improved handling of grids and /r rover call sign designators.
- Six-character locators and call sign suffix support for portable operators, focused on EU VHF contesting.
- Support for standard contest exchanges in the ARRL RTTY Roundup, such as 579 MA or 559 0071.
- Support for call signs of up to 11 alphanumeric characters, to accommodate non-standard and compound call signs.

Support for new exchanges should expand the ability of contesters to use FT8 and other WSJT-X protocols during contests that allow digital contacts and where the exchange is a traditional signal report and state/province/country.

According to the release notes, WSJT-X 2.0 also offers "significantly better sensitivity" (about 1 dB) for the WSPR decoder. In addition, color highlighting of decoded messages provides worked-before status for call signs, grid locators, and DXCC entities on a by-band basis. Color highlighting can also identify stations that have -- or have not -- uploaded their logs to "Logbook of The World" (LoTW) within the past year. Those participating in WSJT-X beta tests are expected to report their experiences to the developers and upgrade to the general availability release when it becomes available. Visit the WSJT-X web page for more information. ARRL Letter, 9/20/2018

Two 40-Meter Broadcast Intruders Gone, IARU Region 1 Monitoring System Reports

The IARU Region 1 Monitoring System (IARUMS) reports that two long-time broadcast intruders on 40 meters are gone. IARUMS Coordinator Wolf Hadel, DK2OM, said in the August IARUMS newsletter that Radio Hargeisa in the Republic of Somaliland on 7.120 MHz, and Radio Ethiopia on 7.140 MHz, departed the band during the last week of August.



Screenshot of a Russian Navy System transmission on 7.182 MHz. [Wolf Hadel, DK2OM, image]

"We did not miss them," he commented.

IARUMS did report increasing military traffic on 7 and 14 MHz, "especially on digital modes from Russia and China." In addition, a wideband over-the-horizon (OTH) radar in China has caused serious problems on 20 meters, while an Iranian radar on 28.860 MHz "could be heard under sporadic E conditions." German telecommunications authorities have filed a formal complaint. Hadel said a Russian Navy system believed to be in Moscow appeared on 7.182 MHz on F1A, a 200 Hz shift, identifying as RDL. German telecommunications authorities were notified.

Hadel also reported "childish behaviour" by hams in western and eastern Ukraine "insulting each other or playing music every day" on 7.055 MHz (LSB). Reports of amateur band intruders can be submitted via the IARU Region 1 Monitoring System Logger. ARRL Letter, 9/13/2018

US ARDF Team Tops its Own World Championships Medal Count in Korea

Team USA took home 10 medals from the just-concluded 2018 Amateur Radio Direction Finding (ARDF) World Championships, the highest medal count since the US team began participating in the international event 20 years ago. The 19th World ARDF Championships took place September 2 - 8 near the resort city of Sokcho, South Korea. Hidden transmitters were scattered in forests encompassing 1,000 acres or more. The US has been represented at every ARDF World Championships event since 1988, with competitions taking place every 2 years.



On September 4, the first day of competition, the US won its first medal of this year as Ruth Bromer, WB4QZG, captured individual 3rd place in the W60 category in the 80-meter foxoring competition. The next day, the team's M50 competitors -- Vadim Afonkin, KB1RLI; Nicolai Mejevoi, and Bill Wright, WB6CMD -- won bronze medals in the classic 2-meter team competition. That same day, the team of Ken Harker, WM5R -- the Team USA Captain and the new International Amateur

Radio Union (IARU) Region 2 ARDF Coordinator -- and Joe Burkhead won bronze in the M40 category on 80 meters. Team awards are based on the aggregate scores of individual team members, who are not permitted to assist one another on the courses.

Afonkin took an individual gold medal for his 1st-place finish on 80 meters in the M50 category. In the same event, the M50 category team of Afonkin, Mejevoi, and Wright came away with bronze medals in the 80-meter team competition.



Vadim Afonkin, KB1RLI, receives his gold medal at the 19th World ARDF Championships in Korea.

This marked the second time that ARDF Team USA had competed in Korea. Before traveling to the competition, a weekend training camp for Team USA members and other ARDF enthusiasts took place August 10 - 12 at Mt. Pinos in the Los Padres National Forest of California. Complete results of the 2018 ARDF World Championships are posted on the Deutscher Amateur Radio Club website. For more information on ARDF, visit the Homing In website of US/ARRL ARDF Coordinator Joe Moell, K0OV. Follow ARDF Team USA on Facebook. ARRL Letter, 9/13//2018

Radio Amateurs Receive Images from Chinese Lunar Satellite

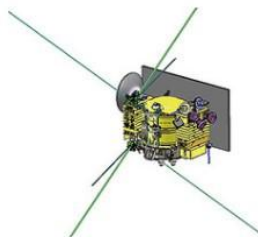
Some earthbound radio amateurs and sky watchers have received images from a tiny Chinese satellite now orbiting the moon. In May, China launched the DSLWP-A and DSLWP-B microsattellites -- also known as Longjiang-1 and Longjiang-2 -- into a lunar transfer orbit, although Longjiang-1 was apparently lost in the process and likely remains in deep Earth orbit. They were deployed as secondary payloads with the Queqiao relay satellite as part of the Chang'e 4 mission to the far side of the moon.

DSLWP stands for "Discovering the Sky at Longest Wavelengths Pathfinder." The satellite will test low-frequency radio astronomy and space-based interferometry, and while it carries Amateur Radio and educational payloads, no transponder is aboard. The Chang'e 4 mission will be the first-ever attempt at a soft landing on the far side of the moon. The Chang'e-4 lander and rover are scheduled to launch in December. The Harbin Institute of Technology (BY2HIT) developed and built the DSLWP spacecraft and is overseeing that mission. The microsat also carries optical cameras from Saudi Arabia.

An open telecommand protocol allows radio amateurs to take and download images. The spacecraft transmits on 70 centimeters (435.400/436.400 MHz), with 250/500 bps GMSK using 10 kHz wide FM single-channel data, with concatenated codes or JT4G. JT4 uses four-tone FSK, with a keying rate of 4.375 baud; the JT4G sub-mode uses 315 Hz tone spacing and 1,260 Hz total bandwidth. According to an article in GBTimes, Longjiang-2 (DSLWP-B) used its own propulsion system to slow down and enter lunar orbit, while the relay satellite "continued past the moon to its special destination." Longjiang-2 has used a student-developed camera to take images of the moon, Mars, the sun, and other celestial objects. Data and images have been downloaded by hams and satellite-tracking enthusiasts around the world, including the US, Brazil, China, the Netherlands, and Italy.

The Harbin Institute of Technology team also operates LilacSat-1, a 2U Amateur Radio CubeSat launched as part of the European QB50 initiative, and LilacSat-2 (CAS-3H), an Amateur Radio and technology test satellite.

The Queqiao communications relay satellite is required for the lunar far-side landing to facilitate communication with a not-yet-launched lander and rover



SPOT the INFORMATION

Ed Hinz, KN6JN

Attendance drawing

The time has finally come for someone to win. That was me!!!! I won \$30.00. \$25.00 in cash and \$5.00 to the repeater fund. Talk about lucky. You can only win if you are present. You have about a one in seventy chance of winning but you have to be there. We have excellent programs each month. If you need a ride contact me or any other officer. Next month the big cash prize will be reset to \$20.00 so plan on attending.

Web site

Our South Bay ARC website is looking great. Big plans to include even more content. Plenty of photos to look at from the camera of Paul KK6BY. Please check it out: www.w6sba.org Look at the calendar for updates on our activities and upcoming events.

Swap meet

The TRW swap meet is on October 27th. 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. Late breakfast or lunch at Denny's at Artesia and Aviation at 11:00 a.m.

Arc Over

Our newsletter is awesome. Glenda does an outstanding job keeping this monthly looking fantastic and informative. Next time you see her (probably our holiday party) thank her for all she does.

because the moon's far side never faces Earth, and some significant scientific measurements from the dark side of the moon require real-time contact with Earth. Queqiao was developed by the China Academy of Space Technology (CAST).



The Queqiao communications relay satellite. [CASC image]

The Harbin Institute of Technology Amateur Radio Club has invited more radio amateurs to get involved with the DSLWP mission, and QSL cards have been designed for different flight phases for amateurs who successfully receive telemetry or make contact. ARRL Letter, 9/6/2018

CALENDAR

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

Club Meeting - 3rd Thursday of the month
October 18, 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,
October 27, 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

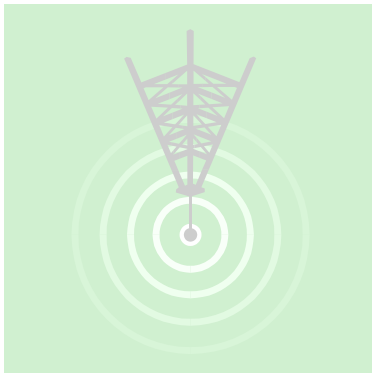
Awards Manager (HF/VHF)	Cliff - K6LH
Health & Welfare	Joe - WB6MYD
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Proofreader	Ray - WA6OWM

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

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TO:



Address Correction Requested

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