



September 2018

ARCOver

A Community Service Organization Dedicated to Amateur Radio Since 1970

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HELLOO SEPTEMBER!
NEW MONTH,
NEW GOALS.
Let's do this!

**Learn Something New
About Amateur Radio
and
Share Your Knowledge!**

E-mail: W6SBA@arrl.net



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

President's Message

The Boy Scouts of America "**Jamboree on the Air (JoTA)**" will take place **October 20th, 2018**. Our Club (SBARC) supports this event at the Scout camp in Cabrillo Beach. We set up one HF station and 2 of UHF/ VHF stations at the site. We also operate on Echolink via Jerry's KI6JJ Echolink repeater station.

Throughout the day we help individual Scouts make QSOs, instructing them in ham radio operation and protocol. We also answer questions about HAM radio in general. We let them know what it is that we like about the hobby, and how we use it in our lives. Hopefully, by helping get them on the air we can spark their interest. We might just help a youngster get a bit closer to becoming a HAM.

We need members to support and setup of the equipment in the morning, operators to Elmer the Scouts throughout the day, and manpower to breakdown the gear for transportation at the end of the day. The goal is to be up and running by the time the first scouts arrive.

Manpower requirements:

- Four persons at Joe's to help load up the afternoon before.
- Six persons for the setup in Cabrillo at 7:00 Saturday morning.
- Six operators for the morning and six for the evening shifts. Many of us find it rewarding to spend the entire day there.
- Six persons to break down the equipment and load the truck.
- Four members for unloading back at Joe's.
- Members are encouraged to get-on-the Air and QSOs with the Scouts throughout the day. This can be done from home via your shack or on EchoLink.
- HF/SSB: 80 meters — **3.940 MHz** and **3.690 MHz** , 40 meters — **7.190 MHz** , 20 meters — **14.290 MHz.**, 17 meters — **18.140 MHz.**, 15 meters — **21.360 MHz**, 12 meters — **24.960 MHz.**, 10 meters — **28.390 MHz.**, 6 meters — **50.160 MHz.**

Looking for a good turn-out and participation from Members.

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

September

PRESENTATION

Tom Essenpreis - KB9ENS - Amateur Extra will be presenting his experiences in Summits-On The-Air (SOTA) at the September South Bay Amateur Radio Club Meeting Thursday September 20th in Room 1 in the Richard Hoffman Education Building, West Tower of Torrance Memorial Hospital at 7:30 PM

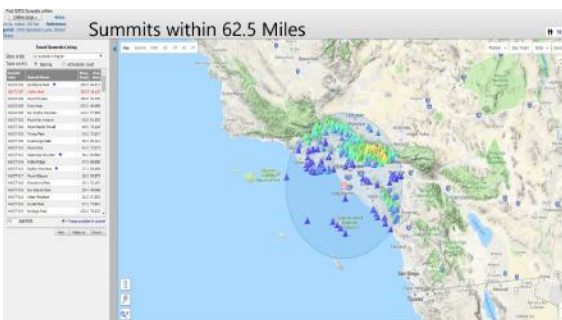
He will explain how SOTA has been carefully designed to make participation possible for all Radio Amateurs and Shortwave Listeners, not just for mountaineers. There are awards for activators (those who ascend to the summits) and chasers (those who operate from home, a local hilltop or even other activators on other summits).

This will be a very engaging presentation if we are hikers, armchair adventurers or have any level of interest or experience in taking it to the field.



Tom grew up on a small grain and livestock farm in Southern Illinois. He earned his Novice ticket at age 10. After finishing his undergrad in mechanical

engineering at Southern Illinois University Edwardsville he commissioned into the US Air Force. He spent 10 years on active duty and was stationed various places including Kadena AB Okinawa Japan, Cape Canaveral AFS Florida, Los Angeles AFB, and Kandahar AF Afghanistan. While on active duty Tom also completed his MS in Space Systems from the Naval Postgraduate School. He now works as a defense contractor in the South Bay. He enjoys MANY facets of amateur radio, too many to list, but a few are SOTA, CW, SKCC, SSB, Elmering, Digital Modes, and Field Day.



Please join us for an evening of fun and adventure.



CORNER

WITH ALAN, KG6ZPL

- 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?
- 2) What is the maximum number of sections into which you can cut a circle by drawing four straight lines through it?
- 3) 16, 06, 68, 88, ?, 98 What number is the ?.
- 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?

August Quiz Answers

Note: Problem #1 was incorrectly stated last month – thanks Alex, KD6LPA. It is stated correctly below.

- 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 Monday, Wednesday, and Saturday, and the drugstore is only closed on Sundays. On which day of the week did I shop? ***Since I went to the farmer's market, I must have gone on Monday, Wednesday, or Saturday. Getting a haircut rules out Monday and going to the bank rules out Saturday. I went on Wednesday.***
- 2) Fred is the 25th fastest and the 25th slowest in his gym class. How many are there in the class. ***49. There must be 24 runners slower and 24 runners faster than Fred. 24 + 24 + 1 = 49.***
- 3) Name the next letter in this sequence: JFMAM-JJA ***An "S". The letters are the first names of the months in order.***
- 4) I am an odd number. If you take away one letter of my name, I become even. What number am I? ***Seven. Take away the "S".***

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

Shortwave Radio Reports May Offer Best Evidence of Amelia Earhart's Fate, Group Believes

The International Group for Historic Aircraft Recovery (TIGHAR) believes it has the key to unlock the decades-old mystery of what happened to famed aviator Amelia Earhart and her navigator Fred Noonan in their planned circumnavigation of the globe in 1937. TIGHAR's The Earhart Project analyzed dozens of radio transmissions received by radio amateurs and other shortwave listeners during the frantic search to locate Earhart's plane when she did make her scheduled arrival at Howland Island. Many theories have sprung up over the years to explain the mysterious disappearance, but a TIGHAR research paper entitled *The Post-Loss Radio Signals*, published in July by The Earhart Project, maintains that "the patterns and relationships emerging from the data show that TIGHAR has answered the 81-year-old question: 'What really happened to Amelia Earhart?'"

The Earhart Project "is testing the hypothesis that Amelia Earhart and Fred Noonan landed, and eventually died, on Gardner Island, now Nikumaroro in the Republic of Kiribati," its website says.

In July 1937, a young teenager named Betty Klenck, listening to shortwave bands on her family's radio, intercepted and transcribed pleas for help that TIGHAR calls "a remarkable record of perhaps the last communication" from Earhart and Noonan and "leave little doubt" that the 15-year-old heard a genuine distress call from the pair, transmitted from the aircraft Electra. Klenck's notebook, discovered in 2000, inspired TIGHAR's effort to catalog all reception reports.

TIGHAR analyzed nearly 60 other reception reports made in the wake of Earhart's failure to arrive on Howland Island. The vast majority, TIGHAR said, came from government or commercial operators as well as "licensed amateurs" working for the US Interior Department on Howland and Baker Islands, listening on Earhart's primary, harmonically related frequencies of 3,105 and 6,210 kHz. TIGHAR contends that higher-order harmonics of the primary frequencies enabled the "accidental" reception of Earhart's transmissions at greater distances, because those higher-frequency signals would be more prone to ionospheric propagation.

Reports came from the Pacific and the continental US, TIGHAR said, with Earhart reporting her plane

down "on an uncharted island" that was "small, uninhabited." According to accounts, the radio transmissions became progressively more desperate, with Earhart reporting that Noonan was injured and subsequently delirious. The commander of the US Coast Guard vessel *Itasca*, which was involved in the search, discounted the contemporary radio reception reports, saying that all available land areas had been searched. He expressed doubt that Earhart and Noonan made any radio transmissions after their plane disappeared on July 2, 1937. ARRL Letter 8/22/2018



Amelia Earhart standing under nose of her Lockheed Model 10-E Electra in 1937. [National Portrait Gallery, Smithsonian Institution; gift of George R. Rinhart, in memory of Joan Rinhart]

NIST FY 2019 Budget Would Eliminate WWV and WWVH

The National Institute of Standards and Technology (NIST) FY 2019 budget request includes



shutting down "NIST radio stations in Colorado and Hawaii," an apparent reference to WWV and WWVH. Radio amateurs, HF listeners, and others around the world routinely make use of the time and frequency standard signals, which also include propagation information. NIST said eliminating funding currently "supporting fundamental measurement dissemination" would include putting WWV and WWVH off the air for a savings of \$6.3 million. The overall NIST FY 2019 budget request for efforts related to fundamental measurement, quantum science and measurement dissemination is \$127 million, which, the agency said, is a net decrease of \$49 million from FY 2018 levels.

"The proposed reductions will allow NIST to consolidate and focus on narrower core [fundamental] measurement programs while meeting budget levels," the agency said in its FY 2019 budget summary. "NIST will focus on basic research while reducing funding for efforts applying some of its breakthroughs into new measurement applications. ARRL Letter 8/16/2018

HAARP's WSPR Research Campaign Yields Hundreds of Reports on 40 and 80 Meters

Just-completed research at the High-Frequency Active Auroral Research Program (HAARP) transmitters in Gakona, Alaska, successfully took advantage of the WSPR digital protocol and the Weak Signal Propagation Reporter Network (WSPRnet) on July 30 through August 1. University of Alaska Fairbanks (UAF) Space Physics Group researcher and HAARP Chief Scientist Chris Fallen, KL3WX, told ARRL that the research -- HAARP's fourth research campaign under management of the University of Alaska Fairbanks -- went well.



"My 'citizen science' experiments were funded by the National Science Foundation and were conducted for approximately 30 minutes at the end of each campaign day," Fallen said. "They consisted of 2-minute transmissions using the WSPR digital mode in the 40- and 80-meter bands, with a 2-minute off period between transmissions." He said HAARP transmitted in full-carrier, double-sideband AM because it does not have SSB capability. HAARP operated under its Part 5 Experimental license, WI2XFX, with Special Temporary Authority (STA) from the FCC to transmit on amateur bands.

"I systematically varied the HAARP transmission parameters, such as gain, net power, beam direction, and polarization, to see how they affected the reception reports collected in the WSPRnet.org database," Fallen said. "During the 3 days, we gathered more than 300 confirmed reports of signal strength and location from nearly 100 unique participants throughout Canada and the US."

Fallen said the spots, collected along with the corresponding HAARP transmission parameters, are available online, (1) and (2). He said the spreadsheet at the second link is editable by the public, "specifically by citizen scientists who want to manually add their spot or other interesting data analysis," he added. "In this sense, the experiment continues."

He said that HAARP's low-elevation transmissions on 40 meters resulted in the greatest number of spots.

"The most distant spot was located at grid EL96xi, near Boca Raton, Florida, reported by W1NEJ, from a distance of 6,154 kilometers," Fallen said.

"Interestingly, HAARP was aimed in the magnetic west direction during that spot." ARRL Letter 8/16/2018

EME Attempt by Bruce and Tom Sep 2, 2018

On Saturday we gathered on top of the West Parking structure at TMMC and watched Tom and Bruce set up to make their first EME contact. Actually more like pinging the moon and picking up its return. While they knew where it was that fine Saturday morning due to low clouds only briefly saw it. Any way, the attempts was made but no ping was received. However, valuable lessons were learned. Lesson learned is just as valuable as actually made or heard the ping. The set up was with the Yaesu 991A and a computer program specifically set up for that activity. An amplifier and pre amplifier should have done the trick if we could only have seen it. Congratulations on your attempt guys and full well knowing you're not giving up until success is achieved. Good luck as always with future attempts. See Paul's pictures on our web site soon. Joe, WB6MYD

Repeater Problem

Yes, we did have an repeater problem. The error code 'low battery voltage' was real. Scott-N6LEM and I checked it out and found the backup battery low. After 7 years of good use we should not complain right? Anyway, our first order of business was to replace it. After pricing it from several different suppliers we settled on the Duracell AGM Marine sealed battery at around \$ 150 dollars from SAM's. Item was purchased and installed.

Unfortunately that wasn't quite the end of it. Years ago, we had built a circuit externally for a trickle charger. However, we had to think about several other things which require a time delay circuit after loss of power and its return so that we would not be sitting there with it recycling over and over again since that is what usually happens after a power failure. We had taken care of that with electronic time ckt in a mechanical relay. Well it had shorted and the TD was gone. We had to chase that down as well. Anyway, long story short we think we've got it this time.

The only thing remaining is paying the bill. As Tom-KI6RC pointed out to us that if we needed some help with the money part he would happily contribute to that and he did. Thank you Tom. We now are asking if we have others enjoying the use of the repeater to maybe donate something towards this as well. So please help us out and contribute cash or check (payable to SBARC) at the next opportunity (meeting 9/20). It had been supported with funds from the Autopatch membership dues, which is pretty well non-existent with all these cell phones etc. So here we are, as I said those of us and others enjoying our repeater please help us out. Thank you so much. Please feel free to ask any questions you might have for us on that of course. My number is 310-328-0817 or 310-874-0382C.

Joe, W6MYD

US Coast Guard Warns of LED Lighting Interference to Marine Radios, AIS Reception

The US Coast Guard says it's received reports from crews, ship owners, inspectors, and other mariners regarding poor reception on VHF radiotelephone, digital selective calling (DSC), and automatic identification systems (AIS) when in the vicinity of LED



lighting systems. This could include interior and exterior lighting, navigation lights, searchlights, and floodlights found on vessels of all sizes.

"Radio frequency interference caused by these LED lamps [was] found to create potential safety hazards," the Coast Guard said in an August 15 Marine Safety Alert. "For example, the maritime rescue coordination center in one port was unable to contact a ship involved in a traffic separation scheme incident by VHF radio. That ship also experienced very poor AIS reception. Other ships in different ports have experienced degradation of the VHF receivers, including AIS, caused by their LED navigation lights. LED lighting installed near VHF antennas has also shown to compound the reception."

ARRL has determined a wide range of interference-causing potential from consumer lighting devices. "While some are relatively quiet, other devices -- even those that meet the required FCC emissions limits -- can still cause harmful interference," said ARRL Electromagnetic Compatibility Engineer Mike Gruber, W1MG. "My best recommendation is to try LED lights before you buy, especially if there is a possibility that the device will be used while you're operating. Once you have determined that a particular LED device is quiet, then purchase as many as you need from that same store."

Over the past few years, ARRL has provided the FCC with reports of LED and other lighting systems that are not in compliance with FCC regulations. In several instances, these devices greatly exceeded the FCC's emissions limits, in one case by as much as 58 dB, creating as much noise as 650,000 legal devices, Gruber said. "Several recent FCC enforcement

Emergency Preparedness

Ed Hinz, KN6JN

Last month my article touched on battery and solar power for emergencies. QST magazine had a nice article on some of the equipment from Goal Zero. Check the article out.

The guest speaker last month, the ARRL representative for Los Angeles, was super. There are so many ways for ham radio operators to become involved in our communities. Get involved.

Over the last few months we have been discussing preparing for emergencies. What have you done to prepare? I urge you to review your stocks for the basics, food, water and other supplies necessary for 72 hours. You should have a kit for home, work and the car. Parents, kids, pets need to be accounted for.

Here are some of the issues I am dealing with. Most of my supplies are stored in the garage. If I am unable to get into the garage I am in trouble. Water and food -- I need to store more. Medicine -- I find it hard to get an extra supply. I need to renew the car kits. I should prepare and plan evacuation kits. I should review with parents to be prepared. Many hours of work are needed to get my radio station for use in an emergency. That will be an ongoing project. For more information about preparedness please look at www.CalOES.ca.gov or www.Ready.gov. In addition the ARRL has extensive training on emergency operations located on their website <http://www.arrl.org/emergency-communications-training>. September is preparedness month so be prepared.

actions involving LED manufacturers have been encouraging," he added. "These actions can and will make a difference."

Gruber said ARRL remains committed to working with both the FCC and manufacturers to help facilitate that positive difference in every possible way. "It is possible for LED and other lighting technologies to coexist with both amateurs and other users of the radio spectrum," he said. -- Thanks to gCaptain.com and Frank Smith, WS1MH

Amateur Radio Emergency Service Volunteers Assist in California Fire Response

Amateur Radio Emergency Service® (ARES®) volunteers pitched in to assist where needed to provide or support communication during the catastrophic fire in California. Volunteers from multiple ARRL Sections in the state stepped up to help. The fires have claimed several lives, destroyed more than 1,000 homes, and forced countless residents to evacuate, including radio amateurs. ARRL Sacramento Valley Section Emergency Coordinator (SEC) Greg Kruckewitt, KG6SJT, said that the last ARES volunteers deployed to support American Red Cross shelter stood down on August 7. Other shelter communicators deployed earlier remained on duty for 10 days. Initially, there were four shelters in Redding. On August 5, the Shasta-Tehama ARES team was able to take its communications trailer to Trinity County to support a shelter in Weaverville opened for Carr Fire evacuees, he said.

"This relieved the Sacramento County ARES volunteers who had been up there for several days," Kruckewitt said, adding that communications at the shelter were important, as power and cell phone coverage was often spotty, with power going off for hours at a time. CalFire reported on August 9 that the Carr Fire in Shasta and Trinity counties covered more than 176,000 acres and was 47% contained. Evacuations and road closures are in effect. At one point, more than a dozen ARES volunteers from Shasta, Sacramento, Butte, Placer, Trinity, and El Dorado counties were working at shelters opened in the wake of the Carr Fire.

Sacramento Valley ARES member Michael Joseph, KK6ZGB, served as the liaison at the Red Cross Gold County Region Disaster Operations Center (DOC) in Sacramento, Kruckewitt noted, adding that Joseph had been in the DOC since the fire started.

Kruckewitt said Winlink was the go-to mode, as fire has damaged several repeaters and no repeater path exists to the Gold County Region of the Red Cross in Sacramento.

"One difficulty we ran into this weekend was that the Red Cross needed [ARES Emergency Coordinator and SEC] contact information for various counties that also are experiencing fires and having to open shelters," he said. Completing that task involved lots of phone calls. "We encourage all ARES members to get to know their neighboring ARES groups and...check into their nets."

Joseph reported last weekend that the Mendocino Complex Fire was being closely monitored, although no additional requests for ARES assistance were being made. The Ranch Fire in the Mendocino Complex as of August 9 covered some 253,200 acres and was 46% contained. The Mendocino Complex Fire is being called the largest wildfire in California history, although the Carr Fire has been more devastating.

ARES teams in other California Sections remained on standby in case they were needed. ARRL Letter 8/9/2018

SPOT the INFORMATION

Ed Hinz, KN6JN

Attendance Drawing:

Jerry KK6JJ was drawn and was not present. Missed out on \$25.00 Next month the big cash prize will be \$30.00 so plan on attending.

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.

Swap meet:

The TRW swap meet is on September 29th. 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.

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.

WELCOME new members

Please welcome our 2 new members. They are Chris-KM6HVO, Tech. and Robert-K3VFA. Robert-K3VFA,

Extra class, is from Manhattan Beach and a long time ham. He will and indicated an interest in Elmering and the club repeater. While Chris - KM6HVO, Tech class is a new ham indicates an interest in computers and antenna/propagation but might need some assistance like we all did at one time or another. So please reach out to them at our next meeting.



John Wilson, AE6LK, had to be readmitted to the hospital on 8/30/18 due to weakness. Please remember him in your thoughts and/or prayers. We're wishing you all the best John!

CALENDAR

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

Club Meeting - 3rd Thursday of the month
September 20, 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,
September 29, 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

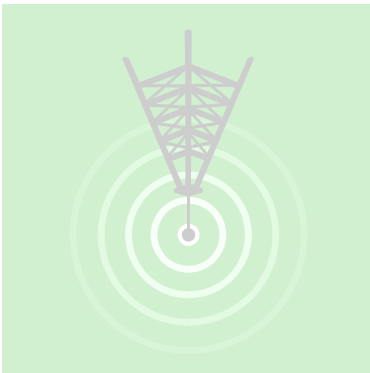
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South Bay Amateur Radio Club Repeater
224.38 MHz · PL - 192.8 Hz Offset -1.6 MHz
(See Calendar for Weekly Net Times)

NEWSLETTER SUBMISSION

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Address Correction Requested

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