Get set for Field Day fun June 25-26

By PEGGY GENTLE, KE6TIS
BIARC Vice President and Field Day Chair

Multifaceted agenda offers 24 hours of entertaining learning at Wailoa Center

Our plans are coming together for this year's Field Day on Saturday and Sunday, June 25-26, at Wailoa Center.

Let me first ask those of you who volunteered use of their HF radios to contact me so I can get you on my official "list". I guess I was more frazzled than I thought, because I thought I would remember. I do remember that big feeling of relief when hands went up at

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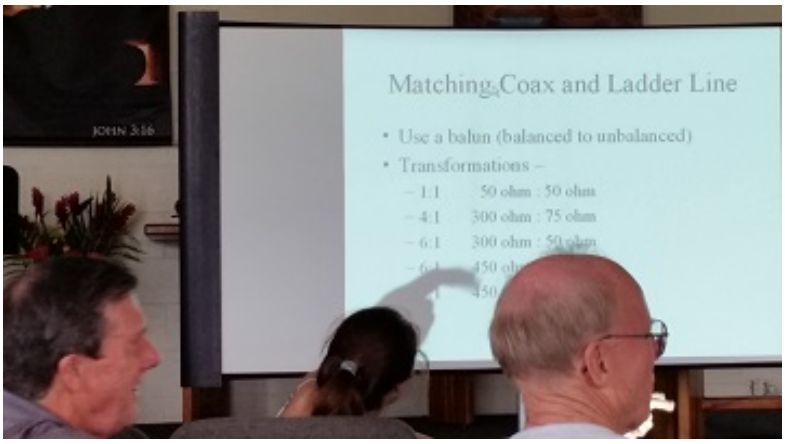


John Bush, KH6DLK, at right, presents info on coax and its amazing capabilities at the May meeting as Doug Wilson, KH7DQ, at left, and the rest of the group also enjoy simultaneous spontaneous shadow puppet illustrations by Angelina Schwiter, WH6EVK.

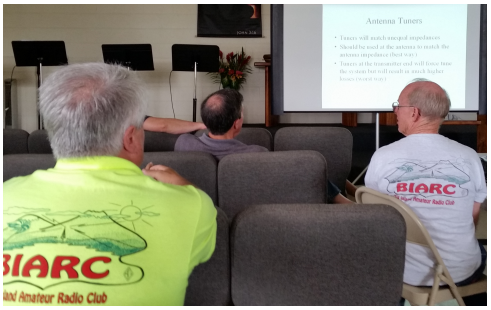
Photos by Linda Quarberg, WH6LQ

Coax, connectors, club assets are May meeting focus

Our May meeting started out with a bang, and it wasn't the gavel. Robert Schneider AH6J had a fainting spell that caused the ambulance to be called just before our meeting started. As of 6 PM that night, Barbara Darling let us know he had contacted her and was doing OK. That's good news. So I got to run another meeting. Luckily for me, it was all familiar friendly faces.

We managed to cover a lot of ground. Now, the bad news: It looks like the repeater from the Girl Scout location is kaput. So we need to find a 440 repeater with ten to 20 watts to replace it. Les K0BAD is on the mainland and John Bush will be contacting him to see what he can find there. Hopefully we can find one soon, so we can get the link back up and working.

We still need some Field Day coordination. With Doug KH7DQ's help with the insurance and the friendly service of the staff at the State Parks office, we have our Field Day permit. I'm going to do an on-air meeting to try and put some more details on the plan. I'm not a good



Antenna tuners are discussed at the May meeting.

arm twister, so please see the field day article (above) and find out where you can lend a hand. And, please: Volunteer.

The new assets committee -- which

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has the responsibility of finding and tracking all the various bits and pieces of club property -- is looking for your assistance. If you know of any club stuff being stored somewhere, let Doug know. We are trying to find a "home" for it. It would be nice to have it all together. Bill Hanson has volunteered his Pahoa property to use, if we can get something to put it in. To that end, he will send a letter to Matson and see if we can get a donated container. Not being a 501c3 organization, donations are not tax-deductible. We may have to start fund-raising.

A maintenance day at Kulani Cone is in the works. Get your weed whacking mojo on and volunteer for the trip up when we get the date. Paul WH7BR says it's not a tremendous lot of work. Getting there takes the time.

The monthly program, on transmission lines, was presented by John Bush. It was pretty thorough. Coax and ladder line, I think is where he started. There's a lot to know. Did you know the LMR 400 now comes as LMR 400 flex? If you have worked with stuff that stiff, you can imagine the improvement. There was information on baluns, and how some people make their own; useful tips on antenna analyzers, antenna tuners, and common mode current. For the common mode current chokes there is now a snap-on version you can add after you have the connectors on. He's a good speaker, and everyone seemed to enjoy the program. Let me add, he did say his experience with the newer BNC snap-on connectors was good.

Hope to see you next month when we meet at Puna Covenant Church again. Lyle, who helps take care of the church, was very helpful, and did all the locking up. We agreed to pay the church a stipend of $25 per use. That seems a very small price to pay for the privilege of meeting there. We thank Bob AH6J for making the arrangements.

Peggy KE6TIS
Secretary pro tem

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the last meeting, because you can't have Field Day without a radio. Please email me at KE6TIS@ARRL.NET.

We will need some help for set-up and help for the tear-down. These special assignments would be a great thing to do, even if you don't want to come and hang out and charm our visitors. Also, how about a planned digital demonstration? Speak up if that's your thing, and share with us all. Also, we are still looking for a generator!!!!

Next question is antennas. Robert NH6AH is trying to get old stuff working and new stuff working. Maybe we could find some back-up? He also volunteered to send the letter to our Mayor to promote our event. We need to have two stations in order to get the GOTA station on the air. Kim WH6KIM wants the fun of doing that!

Doug KH7DQ and Linda WH6LQ have volunteered to do a testing session. This would be a good time to upgrade, before the question pool changes. The test session will be at 10 AM Saturday.

Lynn WH6ETX will be in charge of lunch.

Flyers and ponsters are done. Thanks to Francis WH6CVG.

My fox hunt (hidden transmitter) antenna is almost done. Thanks to Les K0BAD for the help in that, and thanks to Sean KH7SF for making it happen on Field Day. I'm looking forward to that.

Fox hunt, anyone? Peggy KE6TIS and Leigh WH6LC hold direction-finding antennas they built for Field Day.

Oh, we could use someone to sit at the visitor table, where we have the usual ARRL literature and any other appropriate handouts. Mostly, you would just be getting people to sign in and helping to keep the papers from blowing away. I got some good ones from ARRL. Gary WH6EPS is planning on duplicating more of the ARRL posters for passing out on Field Day. Drop by and lend a hand.

Stan AH6KO and Dave WH6ECV are working on getting us some computer logging help. We did okay with paper last year, but those dang computers find the dupes faster.

BIG REMINDER: The park has a list of conditions we have to follow. This year the rules say no pets, no alcohol, and no smoking. If there's a problem, then we could lose use of this facility in coming years. Don't forget that Saturday the 26th, is the potluck! I'm thinking of planning on about 5 PM for the start of dinner. We can camp there overnight, but can't erect other structures like tents.

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We could brush up on ghost stories.

Feel free to call me at 968-7112 with your generous offers of support for our club's Field Day. Everyone is welcome: members, past members, interested individuals, etc. Come help make this Field Day fun! *(P.S. In case it's your first time: Wailoa Center is easily accessible, with lots of parking. It's on Piopio Street, a long cul-de-sac road directly mauka of Bayside Chevron, which is at the corner of Kamehameha and Pauahi streets. Wailoa Center is the roundish structure at the end of the street, directly makai of the State Building.)*

Peggy KE6TIS

~~~ A special tribute to island SKs ~~~

Bob Gomez, KB6EGA, of Kurtistown was building a sturdy new cabinet for his fish tanks when the proverbial lightbulb flicked on above his head! Why not include another favorite hobby by creating a special tribute to his ham pals who have passed on? Although they are no longer around to ragchew, these operators still have a very special spot in his heart. Honored Silent Keys are: Scotty KH6AVP, Corky W6ORS, Paul KH6HME, Ron AH6HN, Eddie W7GMH, Ed NH6HT, Sam KH6AFS, Jack KH6CC, Kenny KH6AFQ and Terry KH7FV.

Romania puts toe in 5 MHz waters with scheduled amateur radio testing

Romania has tentatively joined the group of countries making a band at 5 MHz -- as opposed to a set of discrete channels -- available to Amateur Radio. It has granted radio amateurs access to 5 MHz on a scheduled testing basis for approximately 1 year. Tests are aimed at ascertaining whether propagation is favorable for emergency communication. For now, the band is just 3 kHz wide -- 5363.5 to 5366.5 kHz. Permissible modes are CW, PSK, RTTY, and WSJT, at a maximum EIRP of 15 W. Romanian hams must register for the testing program. Initial testing in the sliver allocation will take place on Thursdays at around 1600 UTC.

Belgium recently made available to radio amateurs a 60 meter band that conforms with the allocation determined by World Radiocommunication Conference 2015 (WRC-15) -- 5351.5 to 5366.5 kHz (15 kHz) with an effective isotropic radiated power (EIRP) of up to 15 W, and all modes allowed.

Spain has renewed its temporary authorization at 5 MHz, which had ended last November, allowing the use of 5351.5 to 5366.5 kHz until the end of 2016, with a maximum EIRP of 15 W.

********** 2016 BIARC leadership **********

President Bob Schneider, AH6J; ***Vice President*** Peggy Gentle, KE6TIS; ***Secretary*** Beau Mills, NH7WV; ***Treasurer*** Doug Wilson, KH7DQ; ***Directors*** Bill Hanson, N0CAN; Barbara Darling, NH7FY; Richard Darling, AH6G; Ted Brattstrom, NH6YK, immediate past-president; and returning Directors Gus Treewater, K2GT; Dennis McCartin, WH6ELY, and Paul Ducasse, WH7BR. ***Program Committee:*** Co-chairs John Bush, KH6DLK, and Les Hittner, K0BAD. ***Repeater Committee:*** Chair Bill Hanson, N0CAN, with Paul Ducasse, WH7BR; Paul Agamata, WH6FM; Bob Schneider, AH6J; and Lopaka Lee, WH6DYN. ***Field Day Committee:*** Chair Peggy Gentle, KE6TIS, with Robert Oliver, NH6AH.

Pupils at St Thomas More Cathedral School in Arlington, Virginia, assembled STMSat-1 in a NASA-provided "clean room." **[School photo]**

Search continues for STMSat-1 radio signal

Youngsters at St Thomas More Cathedral School in Virginia remain optimistic that their STMSat-1 CubeSat, deployed on May 16 from the International Space Station (ISS), will begin transmitting a signal. Helping in the search is the Space Science Center at Morehead State University in Kentucky, which is using its 21 meter dish to scan multiple frequencies for the spacecraft's signal. STMSat-1 is supposed to transmit on 437.800 MHz FM and transmit slow-scan television (SSTV) pictures back to Earth.

"Morehead University picked up something within our frequency range last night," STMSat-1 Education Manager Emily Stocker said May 25 in response to an ARRL inquiry. "It may have been us; it is possible it was MinXSS." The University of Colorado's MinXSS deployed from the ISS at the same time as STMSat-1. Stocker said they were trying to determine if Morehead State picked up a beacon, which probably would suggest a MinXSS signal, or SSTV data, which would likely confirm a signal from STMSat-1. In addition, JA0CAW posted a tweet reporting a signal heard on 437.800 MHz at 1225 UTC on May 25.

The school thanked students at Morehead State for staying up all night listening in the 437 MHz range. Their next step is to install SSTV software to see if they can decode a signal.
The CubeSat was rebooted from the ground just after 0400 UTC on May 24. The reboot was scheduled after the satellite had not been heard from for 7 days. STMSat-1 was supposed to turn itself on once its batteries were fully charged and its mechanized antennas deployed.

Pupils at the school built STMSat-1 during a 4-year-long project, and the satellite was launched to the ISS last December. After being placed in orbit (it is object 41476), the CubeSat initially continued roughly in the same orbit as the ISS and of other satellites deployed on May 16, but it's been moving away a little bit each day. The youngsters have been tracking its orbit.

Hawaiian Islands Grid Madness coming up in September

The Aulani Hui Amateur Repeater Club, a group of technically oriented hams in North Kohala, South Kohala and Hamakua, is supporting and maintaining FM repeaters and remote base stations on the Big Island.

The club promotes VHF/UHF simplex operation through a contest called “Hawaii Grid Madness” unique to the Hawaiian Islands.

It is a four-hour event designed for EMCOMM practice, and for fun. It gives hams an opportunity to test equipment, coverage and operating skills using simplex on 2 meters and 70 cm. It's an event for all radio amateurs in the state of Hawaii, and especially new hams!

The event is scheduled for Sunday, September 18. Mark your calendar, so you don’t forget! There is enough time to build and test new antennas for the event.

Stan Froseth, AH6KO, handles administration. Stan posted a summary of the 2015 activity event at tinyurl.com/zjeev94. Contest rules are at gridmadness.blogspot.com.

Events like this contribute to the Amateur Service as defined in FCC rules §97.1 Basis and Purpose. Going forward, ARRL Hawaii will make it part of our web site and promote it as a section activity, says SM Joe Speroni, AHOA.

ARISS Celebrates 15 Years of Ham Radio in Space, Supported From Hawaii

You may have seen the story on the ARRL website commemorating the 1,000th space station Amateur Radio event supported by the ARISS program (Amateur Radio on the International Space Station). The full story can be seen at tinyurl.com/hszfwcj. What you may not know is the important part that Hawaii played in this story. More than 70 of those contacts were run from Honolulu.

Participation started in the Shuttle Amateur Radio Experiment (SAREX) at McKinley High School in 1992. Shuttle astronauts answered student questions and contacted family and friends via the school's amateur radio telebridge station. A telebridge station basically runs a phone patch for the astronauts, linking them up with students and others around the world. One particularly memorable contact was between the crew of Hokulea in the South Pacific and the crew of STS-50 passing over Hawaii. The circuit setup for this contact was an HF link from Hokulea to UH, then telephone to McKinley, and finally the 2-meter ham band link from McKinley to STS-50.

A permanent gateway station was built at Sacred Hearts Academy (Honolulu) in 1993 and is still in use today. Richard Flagg (AH6NM) and Nancy Rocheleau (WH6PN), a science teacher at the school, have been the main operators of the station for the past 23 years.

Dozens of students in the Sacred Hearts Academy radio club have participated over the years in setting up the station for contacts. Several other Amateurs have contributed to the success of the program – Mike Scott (KH6GOZ), Steve Teegarden (WH6IC), Bob Hilvak (NH6XO), Peter Brown (KH6IRT), Rich Weigand (AH6MC).

More than 110 Hawaii telebridge contacts have been made with schools in 19 states and 17 different countries. Local Hawaii schools and school groups have also had contacts with astronauts via the SHA station. With an average of 100 persons present at each participating school, more than 10,000 people have viewed ham radio in action thanks to support of ARISS and SAREX here in Hawaii.

Oh and one thing further, says SM Joe Speroni: Many of the contacts were scheduled for morning hours on the mainland, meaning that those contacts were conducted between 2 and 4 AM, Hawaii time. Real dedication by the team and quite a contribution to the Amateur Radio Service!

NORTH KOHALA OUTREACH TO KEIKI

Norm Cohler, NH7UA, and Steve, WH7TW, from the Kohala Hamakua Amateur Radio Club (KHRC) set up and demonstrated ham radio at the North Hawaii Community Hospital Keiki Fest on Saturday, April 16. They demonstrated repeater operation, HF on 7088 with Eric Grabowski, KH6CQ, operating from his home QTH. Sending CW with code oscillators was a big hit with the kids. Booths at the event were set up to expose the kids to issues related to environment, fitness, health, mind, nutrition and safety. Ham radio communications was demonstrated as an important contributor to community safety in a way that was fun for the kids. The club operated the booth for four hours beginning at 9 AM.

Hawaii ham goings-on

Courtesy of
Joe Speroni, AHØA
ARRL Pacific Section
Section Manager

5 Big Island National Parks on the Air

From April 16-24, three hams from Michigan -- James Vigne (KB8TXZ), Douglas Basberg (N8VY) and Gregory Stobbs (N8GAS) -- activated five National Parks on the Air sites on the Big Island. They operated 20, 17 and 15 meters using mostly SSB and some PSK31. Contacts were made with KH6/ appended to the Michigan calls and entered in Logbook of the World. **(Visit www.N8GAS.com)**

Left to right: Greg N8GAS, Doug N8VY, and Jim KB8TXZ.

New Maui ASM Alan Maenchen, AD6E, Exploring Internet CW Course

ARRL Pacific Section Manager Joe Speroni, AH0A, invites everyone to check out his monthly report, in HTML format, at:
http://hawaiiarrl.info/stories/2016/04/2016-04.html

Of special interest in the April report: Help for CW-challenged hamsters is coming in the fall.

Classes will be offered for anyone interested in learning CW, Morse Code. Students will be grouped into levels reflecting their experience, or lack thereof, in the workhorse communication art form.

“Want to increase your CW skill level?” says Joe.

“The CW Operators Club (CWops) has been running a very successful CW Academy for a while now which has trained hundreds of new CW operators.

“Presently there is a huge backlog of students wanting to get CW training,” said Joe. “However, Alan, AD6E, is offering to hold classes for KH6 students if there is enough interest.”

For info on the program, please see:
http://cwops.org/cwacademy.html Interested? Contact Alan directly at ad6e@arrl.net.

~~~ National Parks on the Air Update ~~~

ARRL officials report there was non-stop traffic at the National Parks on the Air (NPOTA) booth at Dayton Hamvention®. The operation at the Dayton Aviation Heritage National Historical Park was a big hit as well. Many hams made their first activations, and some NPOTA veterans had fun, too. The NPOTA Forum was packed.

Saturday, June 4, is National Trails Day across the US, and Amateur Radio operators in seven states will be transmitting from all along the North Country National Scenic Trail for National Parks on the Air. Activator John Forslin, KC8ULE, is organizing the event. A certificate will be available from the North Country Trail Association for working an NPOTA Activator in all seven states that comprise the North Country Trail. Visit the Light Up the Trail website for complete information and to sign up as an Activator. NPOTA Activators are encouraged to put all NPOTA-eligible trails on the air on June 4.

There are 58 activations scheduled for the week of May 26-June 1, including the Jamestown National Historic Site in Virginia, and the Canyon de Chelly National Monument in Arizona. Details about these and other upcoming activations can be found on the NPOTA Activations calendar.

The ARRL National Parks on the Air (NPOTA) program is only possible because of dedicated Activators. Activators are the ones who take their gear and transmit from NPS units around the country. More than 800 Activators have made nearly 5500 Activations around the country.

Many NPOTA units are in the wilds of Alaska.

National Parks, preserves, and Wild and Scenic Rivers await the more adventurous Activator who wants to put these units on the air for the first time.

Are you up to the challenge?

In late May, Activations included the Gulf Islands National Seashore (NS08) in Florida, and the Scotts Bluff National Monument (MN66) in Nebraska.

In addition to checking out the NPOTA Activations calendar, remember that you can keep up with the latest NPOTA news on Facebook.

Follow NPOTA on Twitter (@ARRL_NPOTA).

CQ, Contest ... CQ, Contest ... CQ, Contest ...

Kimo Chun, KH7U, has been a radio amateur for 40-plus years and considers himself fortunate also to have worked with radios, professionally, for almost as long.

A Contesting Column
By KIMO CHUN, KH7U

In this first installment please allow me to introduce myself. I have been a radio amateur for 40 plus years and have been fortunate to also work with radios, professionally, for almost as long. I began radio contesting in the early 70's and, in fact, got my first license in the mail while participating in the ARRL Field Day event!

I have helped to build and maintain a high level HF radio station with multiple operating positions and towers full of antennas for around 20 years. I am continuously learning more about the radio craft and how to operate them effectively in all conditions.

What is "contesting"? It is the area of amateur radio that provides lots of fun in a short period of time. If life doesn't allow you to get on the radio each day you can plan a limited operation in a contest and enjoy yourself for that time allotted. It gives you the opportunity to learn and sharpen your radio operating skills. It provides satisfaction by competing against others or by bettering prior efforts. You can also pick up needed DXCC "entities" at the same time.

Many kinds of contests exist using one or more modes (typically, SSB, CW, RTTY,

See CONTESTING on next page

Hot news, free classified ads invited

Aloha, all:

Folks in our extended amateur radio community are invited to submit ads for the BIARC Newsletter Free Classifieds. Send text to lcritchlow@mac.com, not the BIARC address, by the 20th of the month. As long as it's ham-related, it's free.

Also: Please consider submitting text and photos for stories, as well. The joys of hamming it up are virtually unlimited, and it's fun to learn what our friends with similar, or even faintly related, interests are up to.

73,
The Editor

~~~ Great deal on nomadic Optibeam yagi ready to set sail for Hawaii nei ~~~

Aloha BIARC,

I have a great antenna available. We will be moving back home, to Kamuela, in approximately 1 year. We're building a house but unfortunately have to deal with CCRs. I'll be arranging for a small remote control antenna nearby, but cannot handle my Optibeam yagi, which I have used for the past 8 years here in Oregon.

It's a fabulous DX antenna: Optibeam 18-6 multiband yagi, 3 elements on 40 meters, 4 elements on 20, 17, 15, 12 meters and 7 elements on 10 meters. It's been down a few months, disassembled. Boom 39 feet long. Excellent engineering and construction; still in very good condition. Only needs a couple plastic screws that sheared while taking apart and you could replace a few plastic insulators. Very light, small parts, all available from Tom at Optibeam.

The antenna cost me about $6,000 in 2007, including shipping. I'm asking $2,500 plus shipping. But for Big Island hams I offer the following: $2,000 up front and I will bring it in our 40-foot container coming back with household goods. It could go sooner, if I can put it in with house construction materials.

May be crazy, but I would love to see it find a good home on Hawaii. I'd ask that you be able to pick it up from Kamuela.

There are photos on my QRZ.com page and details at Optibeam.de

It's a great antenna. Would like to find a great home for it. Optibeam is the best antenna I've ever had, just too big for our upcoming Kamuela QTH.

73 & Aloha, Bill
AH6FC/W7

Left to right: Ron, AH6RH, Bev, AH6NF, Jim, WH6GS, Bart, AH7C, Kimo, KH7U, and Lionel, NH6LK.

Kalaupapa joins National Parks on the Air

Five Oahu hams traveled to the island of Molokai to activate Kalaupapa National Historical Park (HP18) for the National Parks on the Air (NPOTA) centennial operating event from Thursday, March 31, to Tuesday, April 5.

The team stayed near the lighthouse, at the old lighthouse keeper's house. The team, using the William O Kupele Memorial Club call sign KG6BWG, set up one station at the lighthouse and two others at Ocean View, an open pavilion beside the water between the airport and Settlement.

Propagation was fair, but they made 2,110 contacts on SSB, CW, RTTY, PSK and other digital modes on 10-40 meters using two Kenwood TS-480s and an ICOM 7200. An Elecraft KPA-500 and ACOM 1010 were used during periods of marginal propagation. The antennas included a Hex beam (the best performer), several vertical dipoles and a 40/80-meter dipole.

The group conducted a VE sessions for residents and licensed two more Technician class Amateurs to join two others already there as well as provided training and tutoring on radio operations and emergency communications.

The team thanks the National Parks Service staff, Hawaii Department of Health and the peninsula residents for their hospitality. Several members who have visited in the past commented “It is always a pleasure to be in Kalaupapa.” Team members included Bart (KH7C), Kimo (KH7U), Ron (AH6RH), Bev (AH6NF), Jim (WH6GS), and Lionel (NH6LK). Stuart (KH6FP) provided computer and technical support from Oahu and Clem KH7HO and Steve KH6WG provided spotting assistance from Oahu.

hawaiiARRL.info/stories/2016/04/KalaupapaNPOTA.pdf

digital). There are fast one hour sprints up to 48 hour events. You choose which ones to participate in and learn about. Even if you prefer a more passive approach, perhaps to get your feet wet, you can always provide contacts for stations in the contest. It is preferable that you turn in your log to assist the organizers score the contestants but that is always optional. You just need to read the rules, learn and use the accepted exchange protocols for valid contacts in that contest and any special operating techniques. Then, configure your station to make it work (more on this next time).

Why do it? Simple, it teaches you to operate with skill and confidence and gives you a reason to work at improving your station. This also provides the added benefit of preparing you to provide emergency services should the need arise. If you learn to operate through the adversity in contests you will naturally become a valuable provider of reliable communications to serve your community. You’ll also learn more of the technical aspects of the hobby.

If you have an interest in learning more you can look at the Contesting.com Web site, the ARRL.org site or contact me via email. I’ll be glad to help connect you with what you need. Also, if you’ve been active in a recent contest drop me a note with a few details on which contest, mode, your results and comments that we can share with others in the Pacific Section. Good pictures in JPEG format are also welcome but cannot always be used.

73, Aloha
Kimo KH7U

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The ARRL Letter

FCC Action Anticipated on ARRL's "Symbol Rate" Petition for Rule Making

The FCC has put "on circulation" its decision on the ARRL's Petition for Rule Making (RM-11708), seeking to change the Amateur Service Part 97 rules to delete the symbol rate limit in §97.307(f) and replace it with a maximum bandwidth for data emissions of 2.8 kHz on amateur frequencies below 29.7 MHz. Proceedings on circulation are pending action by the full Commission, although there is a current backlog, and FCC action is not likely in the near future. ARRL General Counsel Chris Imlay, W3KD, said the League has remained patient.

"While we had hoped for more responsive handling, it is understood that the large number of comments from radio amateurs on the Petition took some time to sort out," he said. "It was good to note that the Wireless Telecommunications Bureau has circulated a draft of what we presume to be a Notice of Proposed Rule Making responsive to our Petition to the Commissioners for their consideration. We hope to see the proposal released soon."

In its petition, the League asserted that the changes proposed would "relieve the Amateur Service of outdated, 1980s-era restrictions that presently hamper or preclude Amateur Radio experimentation with modern high frequency (HF) and other data transmission protocols" and would "permit greater flexibility in the choice of data emissions."

Symbol rate represents the number of times per second that a change of state occurs, and should not be confused with data (or bit) rate. Current FCC rules limit digital data emissions below 28 MHz to 300 baud, and between 28.0 and 28.3 MHz to 1200 baud. At one point, the 2013 petition topped the FCC's list of "Most Active Proceedings," attracting hundreds of comments. Read more.

ARRL Contest Advisory Committee Conducting Youth in Amateur Radiosport Survey

The ARRL Contest Advisory Committee (CAC) has been looking into how to attract more youngsters and youth into Amateur Radio contesting, and it has invited all hams, and especially young people, whether or not they're already radio amateurs, to take the Youth in Amateur Radiosport Survey.

"Please spread the word about the survey among your ham friends and local radio and contest clubs," said CAC Chair George Wagner, K5KG, adding that the CAC would like to see more young people engaged in "the thrill and challenge of competitive ham radio contesting -- also called 'radiosport.'" Wagner and fellow CAC member Glenn Johnson, W0GJ, plan to hand out survey announcement cards at Dayton Hamvention® -- Johnson at the NCDXF booth and Wagner at Carole Perry's, WB2MGP, Youth Forum and at the ARRL Youth Rally.

As an initial step, the CAC is gathering information about where and how young people are currently involved in radiosport. It's contacting ham radio clubs, contest clubs, private schools, international youth ham radio organizations, and the general public. The committee is using surveys, focus groups, and even face-to-face meetings to check "the lay of the land" about youth and radiosport in today's world, Wagner said.

Radio contests grew out of attempts in the early 1900s to transmit and receive signals across the Atlantic, essentially the beginning of the use of the "short waves" to span such long distances. Contests have allowed hams to

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The ARRL Pacific Section

webpage is at:

http://www.arrl.org

/Groups/view/pacific-section

practice message handling -- used during emergency communication -- as well as to gauge their own operator proficiency and their station's performance. Over time, contests grew and flourished to the point where many hams today pursue contests as their primary ham activity.

"For those who participate in radiosport, it provides a thrill that's often compared to roller coaster rides or video gaming or big game hunting," commented CAC member Don Daso, K4ZA. "There's just something about contacting a great number of people all over the world as fast as possible, or talking to someone -- just like yourself, at a station like your own -- on the opposite side of the world, and doing it without using a giant infrastructure or even a huge outlay of money."

Like many types of competitions, this "sport," Daso said, can be addictive.

The survey will accept input online until August 31.

Deadline is June 1 for US Radio Amateurs to Submit IARU Region 2 HF Band Plan Suggestions

US radio amateurs have until June 1 to submit suggestions to the ARRL Board of Directors' HF Band Planning Committee regarding possible changes to the International Amateur Radio Union (IARU) Region 2 Band Plan. That band plan and other significant Amateur Radio spectrum issues will be on the agenda for the IARU Region 2 General Assembly in Chile this fall. The ARRL joins other IARU member societies in the Americas in seeking input from the amateur community on the Region 2 HF Band Plan. The HF Band Planning Committee will review the current plan, consider comments from US radio amateurs, and recommend any changes to the ARRL Board for submission to IARU Region 2.

"The ARRL HF Band Planning Committee wants to stress that the IARU Region 2 Band Plan is a voluntary guideline and does not supersede FCC regulations related to spectrum usage," Committee Chairman and ARRL Second Vice President Brian Mileshosky, N5ZGT, noted. He also pointed out two other issues for radio amateurs to consider.

Most Region 2 countries outside the US do not have the sort of detailed subband regulations contained in the FCC's Part 97. For radio amateurs in these countries, the Region 2 Band Plan may serve as the only source of guidance on spectrum usage.

The designation of a calling frequency or band segment for a particular purpose or mode in any IARU band plan does not convey any special rights or exclusivity of use. On the other hand, the absence of a calling frequency or band segment associated with a particular purpose or mode should not suggest that these have been overlooked or are viewed negatively.

The Committee urges US radio amateurs who are considering suggesting revisions to the IARU Region 2 Band Plan first to study the existing IARU Region 2 Band Plan. They then should formulate a clear statement of any proposed changes, including a brief explanation of why each particular change would benefit all IARU Region 2 spectrum users. Participants should include their name and call sign.

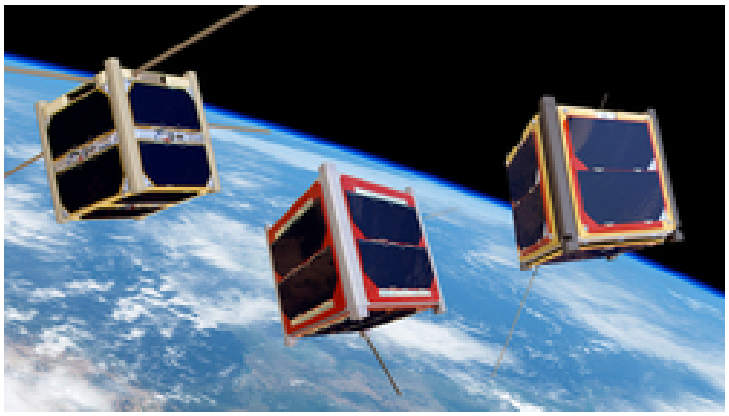
Submit via e-mail by June 1. Messages will be acknowledged.

Amateur Radio to Play Major Role in June Pacific NW Earthquake Exercise

"Cascadia Rising," the largest FEMA exercise of 2016, will get under way on June 7, and Oregon and Washington ARES/RACES organizations both will be heavily involved, with a significant investment in HF activity planned. The scenario will be an earthquake and tsunami disaster involving the entire Pacific Northwest, and the exercise will start with a blackout of all normal, regular communication systems. Amateur Radio will provide emergency/disaster alternate communication systems, and participants will include Maxim Memorial Station W1AW at ARRL Headquarters. The plan calls for W1AW to be active and monitoring, and possibly passing traffic, if necessary, W1AW Station Manager Joe Carcia, NJ1Q, said. ARRL Emergency Response Manager Mike Corey, KI1U, said Cascadia Rising will also involve the Emergency Response Team at ARRL Headquarters.

"Along with participation via Winlink and HF voice, we will use it as an opportunity to exercise the ARRL Headquarters Emergency Response Team," Corey said. "This team is called up to support the ARRL Field Organization during a major disaster, when support cannot be provided during normal business hours. The last activation of the team was during hurricane Irene in 2011."

According to FEMA, a 9.0 magnitude earthquake along the Cascadia Subduction Zone (CSZ), and the resulting tsunami would present the most complex disaster scenario that emergency managers and public safety officials in the Pacific Northwest could face; Cascadia Rising is an exercise to address that disaster.



Three student-built CubeSats -- including the first to carry a D-STAR (Digital Smart Technologies for Amateur Radio) Amateur Radio payload into space -- now are successfully in orbit following an April 25 launch from Guiana.

Three ESA "Fly Your Satellite!" Program CubeSats Now in Orbit and Transmitting

Three student-built CubeSats -- including the first to carry a D-STAR (Digital Smart Technologies for Amateur Radio) Amateur Radio payload into space -- now are successfully in orbit following an April 25 launch from Guiana. Signals from all three have been received on Earth. OUFTI-1 (Orbital Utility For Telecommunication Innovations), constructed by students at the University of Liege in Belgium (ULg), carries the D-STAR payload. The other two CubeSats -- e-st@r-II and AAUSAT4 -- are from Italy and Denmark, respectively. The three CubeSats were developed by student teams under the European Space Agency (ESA) Education Office "Fly Your Satellite!" program, which is aimed at training the next generation of aerospace professionals. The first three radio amateurs to send a recorded signal from OUFTI-1, AAUSAT4, or e-st@r-II will receive a prize from ESA's Education Office. Visit the ESA website for details.

Young ham wins first-place science fair trophy with mag loop antenna entry

A 10-year-old ARRL member from Snoqualmie, Washington, took first place in his grade and division for a magnetic loop antenna project he entered into the Washington State Science and Engineering Fair (WSSEF). Dragan Tuip, KG7OQT, was among the more than 700 presenters at the fair, held April 1-2 in Bremerton.

A fifth-grade student at Yellow Wood Academy in Mercer Island, his project, "Modular HF Mag Loop Antenna," stemmed from his desire for a compact antenna to use in his room with his HF transceiver -- a flea market bargain.

Ten-year-old Dragan Tuip, KG7OQT, with his prize-winning magnetic loop science fair entry. [Mike Bay/WSSEF photo]

According to his dad, Martin Tuip, KG7HAX, Dragan built the antenna himself and successfully tested it by making JT65 contacts with Japan and Georgia. The 59th annual WSSEF marked Dragan's science fair debut.

"When they called my name during the award ceremony, I was stunned! I was amazed!" he told ARRL. "I learned that not everything is always the best, and some things still have room for improvement. I had several people already ask me if they could buy the antenna." Licensed at age 8, Dragan wants to earn DXCC before he turns 11. He eventually hopes to market the antenna.

The magnetic loop design he entered into the science fair consists of a 10-foot circumference loop of LMR-400 coaxial cable with a 2-foot circumference loop of solid copper and a variable capacitor for tuning housed in a central enclosure. According to Dragan, the antenna is usable on 40, 30, 20, 17, and 15 meters with a low SWR. The antenna can handle up to about 10 W for 100 percent duty cycle modes, and up to 15 W PEP for SSB.

The need for an indoor antenna arose after his mom let it be known that she didn't want any new holes drilled in the house nor any more visible antennas. Dragan had seen some mag loop-style antennas in articles his dad had been reading and asked if

something like that might fit in his room.

"I told him that that size would work, and off he went to scavenge the house for parts to build a prototype," Martin Tuip said. "We had to order a capacitor for the prototype, and he built further upon that." Dragan did all the calculations for the wire lengths involved, he said.

"He ran propagation tests using WSPR with my G5RV as reference, and the mag loop was about 80 percent as effective at a fraction of the size," Martin Tuip said.

ARRL, ARISS reps attend 2016 USA Science and Engineering Festival in DC

The ARRL and Amateur Radio were well represented April 15-17 at the 4th Biennial 2016 USA Science and Engineering Festival in Washington, D.C. Scientists, engineers, educators, and students attended the premier science, technology, engineering, and mathematics (STEM) event, where major academic learning centers and research institutes joined forces with corporate partners and government agencies to bring the excitement of leading-edge learning, fun, and discovery.

"Amateur Radio volunteers from the ARRL Maryland-DC Section assisting at the ARRL booth -- graciously funded by Lee Ciereszko, N4TCW -- were joined by ARRL Headquarters staff, and Atlantic Division leadership," said Maryland-DC (MDC) Section Manager Marty Pittinger, KB3MXM. "We had the pleasure of meeting numerous visiting hams from across the country and around the world. It was a privilege to share in this opportunity to network with many educators, corporate executives, military, and local civic groups -- and to share with them the multifaceted role that ARRL plays in STEM."

Pittinger said the spacious DC Convention Center was completely filled with STEM-related organizations from across the US, many offering hands-on demonstrations. Estimates put the number of visitors at more than 365,000, and the ARRL MDC Section booth staff greeted approximately 4000 eager and enthusiastic visitors during the 3-day event, Pittinger said. "We demonstrated Lenz's Law with copper-pipe and neodymium magnets; MESH networks; Morse code, and emergency communications," he recounted. "We also offered information about the ARRL Teachers Institute on Wireless Technology, part of the educational STEM outreach by the ARRL to schools through its Education & Technology Program (ETP)." ARRL Education Services Manager Debra Johnson, K1DMJ, was on hand to talk about the Teachers Institute and answer questions.

Elsewhere at the festival, amateur radio was also represented at the Amateur Radio on the International Space Station (ARISS) exhibit, located in the Center for the Advancement of Science in Space's "Space Station Explorers" display, part of NASA's presence. ARISS team members, including Johnson, and Rosalie White, K1STO, of ARRL; ARISS International Chair Frank Bauer, KA3HDO, and AMSAT's ARISS representative Dave Taylor, W8AAS, were on hand to tell the ARISS story. They also served as hosts for a Saturday afternoon ARISS contact with ISS crew member Tim Peake, KG5BVI, and members of the Boys and Girls Clubs of Greater Washington, DC. ***-- Thanks to MDC SM Marty Pittinger, KB3MXM***

FCC invites comments on petition to eliminate 15 dB gain limit on amateur amplifiers

The FCC has put on public notice and invited comments on a Petition for Rule Making (RM-11767), filed on behalf of an amateur amplifier distributor, which seeks to revise the Amateur Service rules regarding maximum permissible amplifier gain. Expert Linears America LLC of Magnolia, Texas, which distributes linears manufactured by SPE in Italy, wants the FCC to eliminate the 15 dB gain limitation on amateur amplifiers that's spelled out in §97.317(a)(2). Expert asserts that there should be no gain limitation at all on amplifiers sold or used in the Amateur Service.

"There is no technical or regulatory reason an amplifier capable of being driven to full legal output by even a fraction of a watt should not be available to Amateur Radio operators in the United States," Expert said.

Expert maintains that the 15 dB gain limitation is an unneeded holdover from the days when amplifiers were less efficient and the FCC was attempting to rein in the use of Amateur Service amplifiers by Citizens Band operators. While the FCC proposed in its 2004 Notice of Proposed Rulemaking and Order in WT Docket 04-140 to delete the requirement that amplifiers be designed to use a minimum of 50 W of drive power and did so, it did not further discuss the 15 dB amplification limit in the subsequent Report and Order in the docket.

"Although no party advocated retention of the 15 dB limit, it remains in place today," Expert pointed out in its filing. "In the intervening years, advancements in Amateur Radio transmitter technology have led to the availability of highly compact, sophisticated, low-power transmitters that require more than 15 dB of amplification to achieve maximum legal power output."

Irene Kubica, NH7PE, is an avid participant in 10-meter activity and encourages hams at all levels to join in the fun.

The 10-10 Connection

with NH7PE,

10-10 Aloha Chapter

The world of HF radio is open to all licensed amateur radio operators, including Technicians, on the 10-meter amateur radio band.

From the website of Ten-Ten International, here are the basic answers to the overriding question:

Just what is the Ten-Ten International Net?

The Ten-Ten International Net, Inc. was formed back in 1962 as the Ten-Ten Net of Southern California. Its purpose was to promote activity and good operating practice on the ten meter amateur band. During the first few years the organization grew slowly, but by 1975 there were 10,000 members, and the word "International" had crept into the name. To date, there have now been more than 75,000 10-10 numbers issued world wide.

You have to make contacts to get results!

The motto of Ten Ten International: <u>You have to make contacts to get results!</u>

10-10 holds daily (except Sunday) SSB nets at 1800Z on 28.8 and 28.380 MHz.

The purpose of the Nets is to promote activity and good operating practices on the 10-meter amateur band, and to assist radio amateurs in improving their technical skills and operating procedures. The Nets also provide a means for members to make contacts, and to recruit new members. The Nets are open to all radio amateurs worldwide.

Net operations are organized and overseen by the Net Manager who is responsible to the Operations Committee.

In addition to serving as a Net Control Station (NCS), in the rotation of the Nets, the Net Manager attempts to check in to as many Nets as possible to render assistance to the NCS on duty and to fill in for NCS who may be unable to perform his/her duties due to unforeseen circumstances.

Check-in Procedures and Rules: 10-10 Nets operate in accordance with appropriate net procedures for the orderly check-in of stations and the exchange of routine 10-10 information. Each session of the Net will have an NCS who is responsible for maintaining good order on the Net.

Recommended Method for Check In: A station wishing to check-in to the Net should wait until he/she hears the NCS call for check-ins. A station that has been acknowledged by the NCS should give information, to include call sign, name, state or country, 10-10 number and VP number. Stations do not need a 10-10 number to check in. All stations are welcome. The Nets are a great place to learn about 10-10 and its various activites. Frequently a station can work the ten stations necessary to qualify for a 10-10 number. After a station has joined the Net, he/she should not contact any other station unless the contact is first sanctioned by the NCS. The NCS will provide ample opportunity for all stations checking in to work other stations on the Net.

The Net Manager is Bob, N6OPR #45715. Please contact Bob if you have questions about Net operations or might like to serve as a NCS. The daily nets are an excellent place to listen and learn about net procedures. Bob's email is n6opr@msn.com

(Here are the nets emanating from the 50th State:
Aloha Net (from Hilo); every Tuesday at 0430; freq: 28.490
Alii Net (from Lihue, Kauai); every Saturday at 2200; freq: 28.730)

Hollywood Producer, ARRL Patron Dave Bell, W6AQ, SK

Award-winning Hollywood producer and ARRL benefactor Dave Bell, W6AQ, of Encinitas, California, died on May 13. He was 84 and had been a radio amateur for 65 years. An ARRL Life Member and a former chair of the ARRL Public Relations Committee, Bell directed Amateur Radio Today and produced several other ham radio-related promotional videos and films, starting with The Ham's Wide World, a TV documentary filmed in black and white.

"If I have a claim to fame in Amateur Radio, it's probably that I produced the first television documentary about ham radio that got worldwide distribution, and then I made several others before I 'retired' from the ham radio film/video hobby-within-a-hobby and got busy making a living producing TV movies, specials, and documentaries for all of the networks including HBO and Showtime, and made a couple of theatrical feature films -- Nadia and The Long Walk Home," Bell recounted on his QRZ.com profile. He started TV's Unsolved Mysteries, and he received an Emmy Award in 1985 for Outstanding Drama/Comedy Special, Do You Remember Love. Bell chronicled his filmmaking and his Amateur Radio and professional lives in a memoir, World's Best Hobby.

Last year, Bell and his wife Sam, W6QLT (she's a quilter), donated a signed Andy Warhol print to the ARRL. The artwork -- "Myths: Superman 1981" --sold at auction last fall for $150,000. The proceeds are being used to create "The Dave Bell, W6AQ, Endowment Fund" to benefit the League.

Bell was the 1984 Ham of the Year at Dayton Hamvention®. In 2003, the ARRL presented Bell with its first Lifetime Achievement Award for his work on films and videos about Amateur Radio. In 2011, he was named to the CQ Amateur Radio Hall of Fame.

SATERN Founder Pat McPherson, WW9E, SK

Salvation Army Team Emergency Radio Network (SATERN) Founder and past National Director Maj Patrick E. "Pat" McPherson, WW9E, of Coloma, Michigan, died May 14. He was 70. After serving as SATERN Director for more than 23 years, McPherson stepped down 5 years ago, although he reassumed the role in 2014-2015 on an interim basis. An ARRL member and a second-generation Salvationist, McPherson founded the disaster response and relief arm in June 1988 with one other US and two Canadian radio amateurs. Just 2 months after its founding, SATERN responded to provide communication between the US and Jamaica following Hurricane Gilbert.

SATERN became an official Salvation Army program 10 years later, in 1998, and Maj McPherson was formally appointed as its national director. Now an international organization with 4000 members in North America alone, SATERN is dedicated to providing emergency communication and other assistance following disasters and emergencies, and has responded to natural disasters, fires, and air crashes, including the September 11, 2001 attacks.

At the time of his death, McPherson was to be presented with The Salvation Army Certificate in Recognition of Exceptional Service -- a national-level award acknowledging outstanding, distinguished, and significant achievement in or for The Salvation Army. It will be awarded posthumously.

Memorials in Maj McPherson's honor may be made to The Salvation Army.