



February 2017 BIARC Newsletter

Big Island Amateur Radio Club

Planning session launches new year

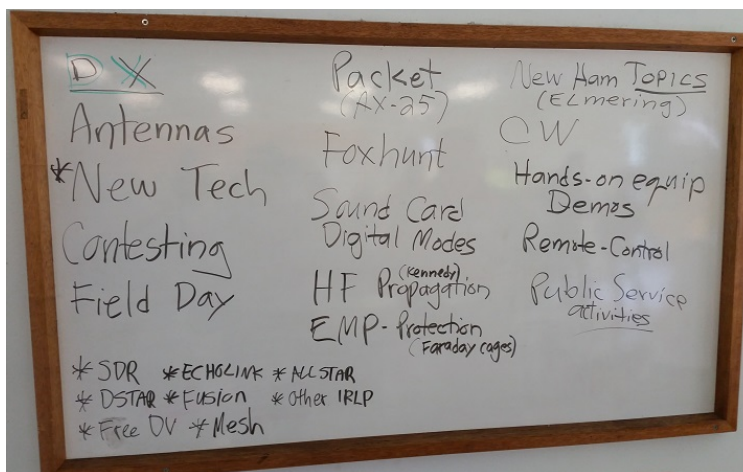
President Gary Schwiter encourages folks to volunteer to serve on the following committees for 2017: Audit: Les Hittner, chair; Assets and Inventory: Cory Allen, chair; Public Information, Marketing and Outreach; Membership and Fundraising; Website; Emergency Communications; Training/Volunteer Examiners; Digital Technology; Radio Contesting/HF; Program: Les Hittner and John Bush, chairs; Repeaters; Field Day; Refreshments.



Program Committee Chairs Les Hittner and John Bush invite suggestions for 2017 schedule at the club's January meeting.

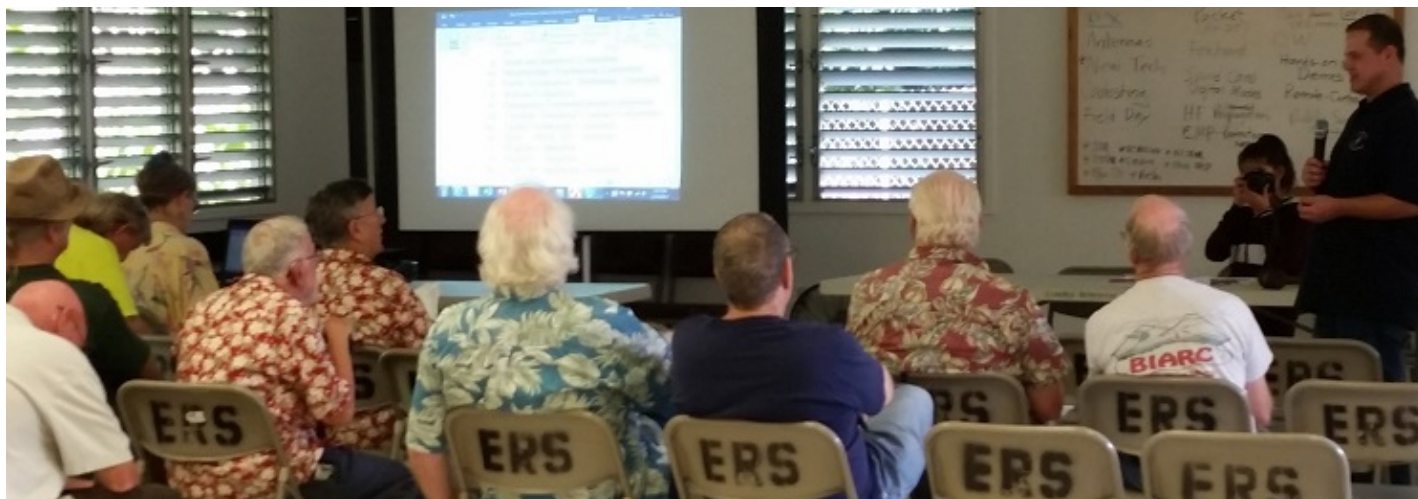
Photos by Linda Quarberg

A free-ranging group conversation produces ideas, at right, for this year's programs.



Continued on next page





President Gary Schwiter fields suggestions and comments from the membership at the January meeting at the Keaau Community Center. The next meeting will be at 2 p.m. on Saturday, Feb. 11, at the Keaau facility. All hams and friends are welcome.

From previous page

The club is led this year by President Gary Schwiter, WH6EPS; Vice President Peggy Gentle, KE6TIS; Secretary Angelina Schwiter, WH6EVK; Treasurer Paul Ducasse, WH7BR; and

Planning for 2017

Directors Gus Treewater, K2GT; John Bush, KH6DLK; Kim Fendt, WH6KIM; Cory Allen, KN6ZU; Barbara

Darling, NH7FY; Richard Darling, AH7G; Bob Schneider, AH6J; and Bill Hanson, NOCAN.

Our treasurer is welcoming the annual dues payments which keep BIARC rolling.

Basic dues are \$20 for an individual and \$30 for a family membership.

~~~ BIARC Meeting Minutes ~~~

Big Island Amateur Radio Club Meeting Minutes January 14th 2017

I. Call to order

Gary Schwiter called to order the regular meeting of the Big Island Amateur Radio Club at 14:08 on January 14, 2017 at Keaau Community Center.

I. Roll call

Angelina Schwiter conducted a roll call. The following officers/directors were present :

Gary Schwiter, Peggy Gentle, Paul Ducasse, Angelina Schwiter, Gus Treewater, John Bush, Kim Fendt, Cory Allen, Barbara Darling, Richard Darling, and Bob Schneider.

The following officers/directors absent:

Bill Hanson

II. Announcements

It was announced that there would be a testing session at 3:30 towards the end of the meeting.



A long list of program suggestions fills "chalkboard" on wall.

Barbara announced that moving of the QSL cards to Oahu.

V. Minutes:

Last meeting was holiday party.

V. Old business

None

VI. New business

a) Statement of Financial Position as of 12/31/16 presented by Doug Wilson

Assets: cash (checking account) \$2005, equipment \$12,498, **Total Assets \$14,503**

Liabilities and net assets: Liabilities \$0, net assets \$14,503, **Total Liabilities and Net Assets \$14,503**

b) Resolution Authorizing the Signing of Checks

Whereas, Big Island Amateur Radio Club maintains a checking account at Bank of Hawaii to pay operating expenses and clear debt; and

Whereas, the board of directors hereby adopts this resolution for signing and endorsing checks as the instrument to properly set forth those authorized to sign checks as well as the names and offices of the duly elected individuals; and

Whereas, the board of directors hereby designates and authorizes those individuals in the following positions to sign Big Island Amateur Radio Club checks:

- 1) President, Gary Schwiter
- 2) Vice President, Peggy Gentle
- 3) Treasurer, Paul Ducasse
- 4) Secretary, Angelina Schwiter



From left: Paul Ducasse, Peggy Gentle, Angelina Schwiter, Gary Schwiter.

c) Programs/ instruction sessions led by co-program chairs Les Hittner k0bad, John Buck kh7t

The program included a brainstorming session and discovery for training topics of the fiscal year of 2017. The brainstorming session engaged the following topics :

DX, antennas, new technology, contesting, field day, sdr, echolink, all star, dstar, fusion, other irlp, free DV, mesh, packet (Ax-25), foxhunt, Sound card, Digital Modes, Hf propagation(Kennedy), Emp Protection (faraday cages), New Ham Topics (elmering) , CW, Hands-on-equipment demos, Remote control, Public service activities.



Program co-Chair John Bush discusses 2017 topics.

d) Primer for club mission and vision statement.

A starter discussion was conducted by Gary Schwiter encouraging club members to start brain storming on the vision of the club. A brief discussion was started and will continue during future board meetings to establish a guiding direction for the club.

e) Committees(required and special committees)

A discussion was conducted to appoint committee chairs to the following required and special committees:

- i. Audit Committee
- ii. Asset and Inventory Committee
- iii. Membership / Fundraising Committee
- iv. Public Information / Marketing / Outreach
- v. Website Committee
- vi. Emergency Communications Committee
- vii. Training / Volunteer Examiner Committee
- viii. Digital Technology Committee
- ix. Radio Contest / HF Committee
- x. Program Committee
- xi. Repeater Committee
- xii. Field Day organizing committee
- xiii. Refreshments Committee



Audit committee: Les Hittner, committee chair Still looking for 2 additional volunteers to fill the required committee.

Asset and Inventory committee: Cory Allen , committee chair

Website committee: Gary Schwiter, Temporary

Program Committee: Co-chairs Les Hittner k0bad, John Buck kh7t

Refreshment Committee: Kimberly Fendt

VII. Committee Reports

QSL card report by: Barbara Darling

For December 152 cards received from Sweden, Israel, Italy, and England

Year end 2016 : 9030 cards

Total cards since March of 2008: **209,406**

VIII.

IX. Adjournment

Gary Schwiter adjourned the meeting at 16:02.

Minutes submitted by: Secretary, Angelina Schwiter

Hams work to encourage next generation of operators



The first Saturday in January is Kids Day across the nation. ~~ KH6LC photo by Rob Van Geen, NH6V

At KH6LC: Epiphany, age 14, operates on 20 meters with her sister Fidelity, age 12, as Carl, KH7BB, coaches.

Four young Puna operators made a total of 355 contacts with NA and 13 DXCC countries, including 8 contacts on 10 meters, for another fun Kids Day at KH6LC, reports coordinator Lloyd Cabral, who sponsors the event every

January: "I'd like to thank everyone involved for making our Kids Day, once again, a huge success."

The ARRL Kids Day is a great time to get youngsters on the air to share in the joy and fun inherent in the hobby.

Sponsored by the Boring (Oregon) Amateur Radio Club, this event has a simple exchange, suitable for younger operators.

Scout Radio Merit Badge adds amateur radio direction-finding

The Boy Scouts of America (BSA) have updated the requirements for the Radio Merit Badge for 2017, although a formal announcement is pending the publication of the 2017 Boy Scouts Requirements pamphlet. A new option for the Radio Merit Badge is Amateur Radio Direction Finding (ARDF). ARRL ARDF Coordinator Joe Moell, K0OV, said he's "really excited" about the move, and he credited Jamboree on the Air Coordinator (JOTA) and K2BSA trustee Jim Wilson, K5ND, with being the "spark plug" behind the ARDF addition.

"Jim visited a training session at the USA ARDF Championships in Texas last April and realized what an excellent activity that on-foot hidden transmitter hunting can be for Scouts," Moell recounted.

"Working with Brian Coleman, KB0MAP, Jim authored the new ARDF Radio Merit Badge

syllabus, which was then reviewed by several leaders of US ARDF community."

A first draft of the new merit badge pamphlet is anticipated late this month or in early February.

Moell said the new merit badge requirements should become effective just in time for the July 2017 National Scout Jamboree in West Virginia, where an ARDF course and equipment will be available to Scouts of all ages. He also hopes there could be a role for ARDF in JOTA.

The Radio Merit Badge ARDF option combines orienteering and foxhunting, and opens a new interactive component to this program.

Other new Radio Merit Badge options include cellular telephones and different types of radio modulation.

Key requirements being dropped from the Radio Merit

Badge include open, closed, and short circuits, as well as schematic symbols and components, because these are covered in the Electricity and Electronics Merit Badges.

The BSA also made some minor editorial changes and reordered requirements for the Amateur Radio option. The radio broadcasting option now includes internet streaming, regulations, and power levels. A medium-wave and shortwave listening option includes both types of listening, as well as listening via streaming services on a smartphone.

The BSA has posted a list of frequently asked questions (FAQs).

Scouts are encouraged to follow the new requirements, although the guidelines may allow use of the previous requirements in some cases.



Illegal Drone Transmitters Could Interfere with Air Traffic Control, ARRL Complaint Asserts

In what it calls an "extremely urgent complaint" to the FCC, ARRL has targeted the interference potential of a series of audio/video transmitters used on unmanned aircraft and marketed as Amateur Radio equipment. In a January 10 letter to the FCC Spectrum Enforcement Division, ARRL General Counsel Chris Imlay, W3KD, said the transmitters use frequencies intended for navigational aids, air traffic control radar, air route surveillance radars, and global positioning systems.

"This is, in ARRL's view, a potentially very serious interference problem, and it is respectfully requested that the products referenced...be investigated and removed from the marketplace immediately and that the importers be subjected to normal sanctions," ARRL's letter said. Some of the transmitters operate on frequencies between 1,010 and 1,280 MHz. "These video transmitters are being marketed ostensibly as Amateur Radio equipment," the League said, "but of the listed frequencies on which the devices operate, only one, 1,280 MHz, would be within the Amateur Radio allocation at 1,240-1,300 MHz." Even then, ARRL said, operation there would conflict with a channel used for radio location.

ARRL said the use of 1,040 and 1,080 MHz, which would directly conflict with air traffic control transponder frequencies, represented the greatest threat to the safety of flight. The use of 1,010 MHz, employed for aeronautical guidance, could also be problematic.

ARRL cited the Lawmate transmitter and companion 6 W amplifier as examples of problematic devices being marketed in the US. Each costs less than \$100 via the Internet. The device carries no FCC identification number.

"[T]he target market for these devices is the drone hobbyist, not licensed radio amateurs. The device, due to the channel configuration, has no valid Amateur Radio application," ARRL told the FCC. "While these transmitters are marked as appropriate for amateur use, they cannot be used legally for Amateur Radio communications." In the hands of unlicensed individuals, the transmitters could also cause interference to Amateur Radio communication in the 1.2 GHz band, ARRL contended.

The League said it's obvious that the devices at issue lack proper FCC equipment authorization under FCC Part 15 rules, which require such low-power intentional radiators to be certified.

ARRL cited the Lawmate transmitter as an example of problematic devices.

"Of most concern is the capability of the devices to cripple the operation of the [air traffic control] secondary target/transponder systems," ARRL said. "These illegal transmitters represent a significant hazard to public safety in general and the safety of flight specifically."

The surge in sales of drones has been dramatic. The FAA has predicted that combined commercial and hobby sales will increase from 2.5 million in 2016 to 7 million by 2020.

In Exhibit A of the January 10 letter, "Illegal Drones Threaten Public Safety," the League noted that some of the drones and associated

equipment it has come across "are blatantly illegal at multiple levels," with some drone TV transmitters described as "particularly alarming."

"Rated at six times over the legal power limit, and on critical air navigation transponder frequencies, these devices represent a real and dangerous threat to the safety of flight, especially when operated from a drone platform that can be hundreds of feet in the air," the exhibit narrative asserted.

Radio Club of America Announces New "Wireless Women" Section on Website

In an effort to encourage more participation of women and girls in the wireless industry, the Radio Club of America (RCA) has created a new "Wireless Women" section on its website, designed to assist women considering careers in wireless and encouraging them to get involved in technology. Information includes resources such as "Notable Women in Wireless," "RCA's Vivian Carr Award," and "Professional Wireless Organizations for Women," as well as web resources for women and girls interested in wireless. There's also a list of universities that have an engineering focus and significant enrollment by women.

"RCA has a long history of recognizing the achievements of women in wireless," RCA President Tim Duffy, K3LR, said. "Three former RCA presidents are women, and we have many female officers, directors, and committee members. We created the Vivian Carr award in 2014 to recognize women who have contributed significantly to the wireless industry, and Director Carole Perry [WB2MGP] has led RCA's effort to educate youth about wireless for decades."

Duffy credited the efforts of several female RCA members, including Secretary Margaret Lyons P.E., Executive Committee member and Marketing & Development Committee Chair Elaine Walsh, former RCA president Mercy Contreras, and others, for assembling the information that might be useful to women and

girls who are interested in wireless. "We welcome additional ideas or input from the wireless community to help this section of our website become more useful," Duffy said.

Winter Field Day is Just Ahead

Field Day is not just for summertime anymore. Winter Field Day, sponsored by the Winter Field Day Association (WFDA), will take place over the January 28-29 weekend, and it can be a terrific time to prep for ARRL Field Day in June. The annual event's stated purpose is to encourage emergency operating preparedness in the winter, but it's also an excuse to get out of the house and enjoy the great outdoors. According to the WFDA, getting ready for emergency communication in a winter environment is just as important as the preparations and practice that take place each June during ARRL Field Day, and -- let's face it -- it's not cold and snowy everywhere during the winter months. Your local climate could be quite the opposite.

"Don't let those winter doldrums keep you locked up in the house," the WFDA says. "Get out and play some radio!" The WFDA said it believes that maintaining operating skills should not be limited to fair-weather scenarios.

The event, which got its start in 2007, is not restricted to North America. All Amateur Radio operators around the world are invited to participate, and there are three entry categories -- indoor, outdoor, and home. The rules are similar to those for ARRL Field Day. Operation will take place on all HF bands except 12, 17, 30, and 60 meters, as well as on VHF, UHF, and satellite. The event runs 24 hours. US and Canadian stations exchange call sign, operating category, and ARRL or RAC section.

The WFDA encourages both group and solo operation, and if you're not up for an outdoor winter adventure involving Amateur Radio, you can operate from the comfort of your shack. As the WFDA says on its Facebook page, "The object is winter fun!"

New "Amateur Radio Parity Act" Bill Introduced in US House of Representatives

[(Late January update from ARRL Pacific Division Director Robert B Vallio, W6RGG; w6rgg@arrl.org):

Bob writes: "I just observed, on CSPAN TV, the passage of HR-555, the Amateur Radio Parity Act, by a voice vote. This bill will now be sent to the Senate for their passage, which will result in that bill being sent to the office of the President for signing into law.

"Thank you to everyone that sent an e-mail to their Representatives and Senators. I know, from reports by our Washington lobbyists; that many Representatives and Senators were convinced by the sheer volume of mail that they received on this bill, to vote in the affirmative. I am confident that the Senate will take the same action in a short time. More information is available on arrl.org."

73, Bob W6RGG]

The background story: H.R. 555 -- a new "Amateur Radio Parity Act" bill -- has been introduced in the U.S. House of Representatives. The bill's language is identical to that of the 2015 measure, H.R. 1301, which passed in the House late last summer but failed to gain the necessary support in the waning days of the US Senate.

As with H.R. 1301, the new measure introduced on January 13 in the 115th Congress was sponsored by Rep. Adam Kinzinger (R-IL), with initial co-sponsorship by Rep. Joe Courtney (D-CT) and Rep. Greg Walden, W7EQI (R-OR). Walden now chairs the House Committee on Energy and Commerce, to which the new bill has been referred. H.R. 555 will get an initial airing in the Subcommittee on Communications and Technology. When H.R. 1301 came up in committee, Walden spoke forcefully in favor of the measure, which ultimately attracted 126 House cosponsors.

"Rep. Kinzinger has again stepped forward to introduce this important legislation," said ARRL CEO Tom Gallagher, NY2RF. "His commitment stems from exposure to what the Amateur Radio community brings to the service of all

communities. ARRL and radio amateurs nationwide owe Rep. Kinzinger a resounding 'Thank You!' for his efforts on their behalf."

H.R. 555 calls on the FCC to establish rules prohibiting the application of deed restrictions that preclude Amateur Radio communications on their face or as applied. Deed restrictions would have to impose the minimum practicable restriction on Amateur Radio communications to accomplish the lawful purposes of homeowners associations seeking to enforce the restriction.



Harry Wolf, W6NKT, at his station. [Courtesy of Neal Swanberg, KG6AYI]

Harry K. Wolf, W6NKT, SK at 107; May Have Been World's Oldest Active Radio Amateur

Harry K. Wolf, W6NKT, of Morro Bay, Calif., has died just a couple of weeks short of his 108th birthday. Wolf may have been the oldest active radio amateur in the US, if not in the world, although no official records are maintained. Licensed since 1936, Wolf was an ARRL member and a Life Member of the Quarter Century Wireless Association. Wolf was on the air daily, mostly on 40-meter CW.

Born in Paso Robles, California, Wolf said in his QRZ.com profile that he built his first radio as a young teenager in 1922. He got his ham ticket while living in Arizona, and held the call sign W6NKT for his entire life.

While serving in the US Navy during World War II, Wolf taught navigation to cadets in San Luis Obispo, California. Later, he served for 31 years as a professor of electronics engineering at two University of California campuses.

FEMA Interoperability Exercise Deemed a Success, Monthly Exercises Set for 2017

Laura Goudreau, KG7BQR, Regional Emergency Communications Coordinator for FEMA Region X, said a December 21 Region X interoperability communications exercise on 60 meters went well. FEMA Region X, which consists of Alaska, Idaho, Oregon, and Washington, now has announced that it will hold similar exercises each month in 2017, with all radio amateurs welcome to participate.

"We had 48 check-ins, of which 42 were amateurs," Goudreau said of the December event. "It was very successful and also included our first digital test." The "COMMEX" event consisted of check-ins from authorized state, tribal, federal, and Amateur Radio stations to test HF interoperability in case of an emergency or disaster response. The interoperability aspect between federal stations and Amateur Radio licensees was coordinated and authorized by the NTIA and the FCC.

The net included a digital component, intended as a one-way broadcast to test FEMA's ability to send messages and for remote stations to receive them. Goudreau said that while there's still room for improvement in the digital area, overall, she was happy with how the exercise played out.

During 2017, FEMA Region X will hold a communication exercise (COMMEX) on the third Wednesday of each month, 1500-2100 UTC. The initial exercise took place on January 18.

"The intent of [each] COMMEX is to test and exercise interoperable communications (federal/state/local/tribal/amateur) during a major disaster, where communications infrastructure would be significantly damaged or destroyed," a FEMA Region X announcement said. FEMA Region X will use the call sign WGY910. Others taking part in these exercises will include, but are not limited to, other FEMA stations, SHARES stations, and Air Force and Army MARS stations. All stations are encouraged to participate.

The COMMEX will use the five 60-meter channels: 5,330.5 kHz, 5,346.5 kHz, 5,357.0 kHz, 5,371.5 kHz, and 5,403.5 kHz. The area of operation is the Continental US. -- **Thanks to FEMA Region X Regional Emergency Communications Coordinator Laura Goudreau, KG7BQR, and FEMA Spectrum Manager Dave Adsit, KG4BIR**

Philippines' Ham Emergency Radio Operations Net Activates for Super Typhoon

Super Typhoon Nock-Ten (called "Nina" locally) interrupted Christmas for radio amateurs in the Philippines, who responded to provide communication for the disaster. The category 4 storm claimed six lives, and more than 380,000 residents were evacuated as the storm cut a path through the Philippines. Warnings were posted for flooding and mudslides. The slow-moving typhoon made landfall seven times from Sunday evening until mid-day on Monday. The Philippines Amateur Radio Association's (PARA) Ham Emergency Radio Operations (HERO) net activated in advance of the storm, which cut power to five provinces, downed trees, caused widespread damage, and dimmed the festive occasion in Asia's largest Roman Catholic nation.

"A truly commendable job was done by many radio amateurs, who not only gave up their traditional Christmas activities, but some had to stop transmissions because they were in the storm path," Jojo Vicencio, DU1VHY, said. Amateur Radio volunteers used both HF and VHF during the storm response.

Vicencio said that as the typhoon first made landfall in Catanduanes, some network stations were forced off air by high winds in excess of 120 MPH. Stations gradually returned to the air to report extensive damage in their areas. HERO reported that as the typhoon swept along the Southern Tagalog region, it made landfall several times. Marinduque also was badly hit.

"It created a large swath of destruction and debris -- uprooted and fallen trees and posts, landslides, impassable roads, and other

damage," Vicencio said. "Even our own HEROs were not spared." Net participants were able to compile damage reports and relay them to authorities, some of which had tuned to the HERO net.

"It has now become a reality that our emergency calling frequency is the most listened to during disaster," Vicencio said. "Government operators listened in...armed forces station Peacemaker in Catarman, for example, broke into the frequency looking for a counterpart station also in Northern Samar." The HERO net also heard from the National Disaster Risk Reduction and Management Council and the Office of Civil Defense. Vicencio said the HERO HF net on 7.095 MHz never faltered. --
Thanks to Jim Linton, VK3PC

HamSCI Members Showcase Amateur Radio-Related Research at AGU Fall Meeting

Ham Radio Science Citizen Investigation (HamSCI) scientists were among those taking part in the fall meeting of the American Geophysical Union (AGU) in San Francisco earlier this month. The December 11-17 gathering, which attracted some 24,000 geoscientists, offered an opportunity for HamSCI scientists to present Amateur Radio-based research, discuss possibilities for upcoming experiments, and network with members of the citizen science and space science communities. Two young university-affiliated radio amateurs -- Nathaniel Frissell, W2NAF, a post-doctoral research associate at the New Jersey Institute of Technology (NJIT), and Virginia Tech (VT) undergraduate researcher Magda Moses, KM4EGE -- offered poster presentations at the AGU meeting. Frissell said he feels the radio amateurs made a good impression.

"As I go to these meetings and tell different people about the HamSCI work, I find people that either want to contribute or that I think would have something important to say," Frissell told ARRL. "Once I identify these people, I invite them to our HamSCI Google e-mail group,

where we can discuss possible experiments or ways to use ham radio for science. We now have almost 60 scientists and ham radio operators in the group."

Frissell's poster presentation, "HamSCI: The Ham Radio Science Citizen Investigation," discussed Amateur Radio and HamSCI's objectives and demonstrated how the Reverse Beacon Network (RBN) can serve as a scientific instrument. It also outlined plans for the Solar Eclipse QSO Party (SEQP) next August. (An introductory Solar Eclipse QSO Party article is set to appear in the February 2017 issue of QST; final SEQP rules will be available by Hamvention in May.)

Moses called the Fall AGU Meeting "the most scientifically diverse conference" she's ever attended, with many sessions and presentations encompassing a variety of disciplines. "This diversity was especially evident in the citizen science sessions and offered a unique opportunity for networking before the eclipse," she told ARRL. "It was also interesting to see similarities to HamSCI in some aspects of other citizen science projects."

Moses's poster presentation, "Characterizing the Ionosphere Using a Commercial Off the Shelf Software Defined Radio System," described propagation experiments between Blacksburg, Virginia, and Newark, New Jersey, aimed at better understanding the use of HF links for characterizing the ionosphere during the total solar eclipse later this year. Moses first presented ray-trace diagrams through an eclipsed ionosphere, and then used propagation test data to show that 80 meters was most useful for identifying diurnal variations along the southwest Virginia-to-New Jersey signal path.

During a general HamSCI meeting, members talked about rules for the upcoming SEQP, installation of additional RBN receivers, use of data from other networks such as WSPRNet, the design of better measurement techniques, and possibilities for future HamSCI experiments. Plans for Hamvention 2017 include a display table and the program for a 90-minute ARRL-sponsored forum.



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.

Lots of fun in store for hams on 10 meters in 2017

Ten-Ten International Net's first QSO Party of 2017 will be held February 4-5 UTC time. That's 48 hours of 10-meter fun in the Winter Phone QSO Party.

For you digital lovers, prepare for the Spring Digital QSO Party at the end of April.

Should anyone hear the call sign W6OI, 10-10 number 109, be sure to QSL, as that is the 10-10 International Club Station. Louise, N6ELK, operates W6OI on the daily 10-10 nets and Bob, N6OPR, will also give out W6OI details daily.

Ten-Ten International Net encourages qualified college-bound amateur radio operators to take advantage of the opportunity to apply for one of five \$2,000 scholarships. There's no restriction on the course of study, but applicants must promise to seek at least an Associate Degree from a college or university. Non-U.S. amateurs

and those seeking graduate degrees are also eligible, as are students who study outside the United States. Write to the Foundation for Amateur Radio (FAR) Scholarships; P.O. Box 911; Columbia MD 21044-0911 for the application, which must be submitted by April 15. Or, go online to <http://www.farweb.org>.

CW News: Remember that Bob, KB6EGA, has begun his CW series again. Listen and participate on Thursdays at 8 p.m. HST on 147.120. This reporter is practicing CW once again and this will be my fifth or sixth time going through Bob's series. My CW is improving. I recommend that you give CW a whirl, and Bob offers a fun, user-friendly half-hour coaching session each week.

**73,
Irene, NH7PE**

CW Notes: The International Morse Preservation Society of Great Britain has the Americas Chapter, FISTS CW Club, which encourages all hams to get on the air and operate CW.

It takes \$10 to join FISTS CW Club and get your FISTS number for life, a quarterly KeyNote Newsletter and you are ready to work toward all FISTS awards. FISTS frequencies are around 3.558, 7.058, 14.058, 21.058 and 28.058MHz.

Code Buddy Volunteers are available to help FISTS members increase their speed or to simply improve their sending and receiving of Morse Code. The following web page lists Code Buddy Volunteers: <http://www.fistsna.org/codebuddy.html>. For membership questions, ask Dennis Franklin, K6DF, at membership@fistsna.org.

MISCELLANEOUS ALTERNATE FACTS, FYI

aka, info tailored for hams

Run across a website or a story or a tip that may be of interest to fellow hams?

Submit it to the newsletter at lcritchlow@mac.com.

Here's a recent submittal about our hero, Hiram P. Maxim.

Gun silencers were invented in 1908 by Hiram Percy Maxim, a graduate of MIT whose father invented the first fully automatic machine gun. The younger Maxim had a knack for reducing loud noises; he also contributed to the development of the automobile muffler.

"I have always loved to shoot, but I never thoroughly enjoyed it when I knew that the noise was annoying other people," he said late in life.

"It occurred to me one day that there was no need for the noise. Why not do away with it and shoot quietly?"

Maxim solved the problem in the bathtub. He noticed that the water swirled silently down the drain. What if the gases produced from firing a bullet could swirl that way, too?

So Maxim put what he called "a whirling tube" on the end of a rifle. It successfully muffled the sound of the gunfire. Soon, the whirling tube was U.S. Patent No. 958,935, titled "Silent Firearm."

*****2017 BIARC leadership*****

The club is led this year by President Gary Schwiter, WH6EPS; Vice President Peggy Gentle, KE6TIS; Secretary Angelina Schwiter, WH6EVK; Treasurer Paul Ducasse, WH7BR; and Directors Gus Treewater, K2GT; John Bush, KH6DLK; Kim Fendt, WH6KIM; Cory Allen, KN6ZU; Barbara Darling, NH7FY; Richard Darling, AH7G; Bob Schneider, AH6J; and Bill Hanson, N0CAN.

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The ARRL Pacific Section  
webpage is at:

<http://www.arrl.org/Groups/view/pacific-section>

## ~~~~Free classified ads~~~~

(Send text for ads by 20th of month to [lcritchlow@mac.com](mailto:lcritchlow@mac.com))

I am returning to Australia on March 1 and have the following items for sale: Yaesu FTdx3000 for sale for \$1200. Includes manual, new Yaesu hand mic and keypad. Latest firmware upgrade. MARS TX mod. Yaesu MD-100 desk mic, \$125. Radio and mic if, bought together \$1300. Heil Pro-7 (pink) with several adapters, 2 cords and spare headband \$195 in original box. Very little use. 20 used vintage Astatic D-104 Microphones, including Silver Eagles, at various prices from \$40 to \$125...all in good working order and a connector will be wired for your radio and a new 9v battery included. NEW Astatic D-104 FINAL EDITION in metal/glass presentation case and original box, \$295.

~~~ 73, mahalo, Eddie NH7AA (808) 498-0793 or [nh7aa@aloha-radio.com](mailto:nh7aa@aloha-radio.com)