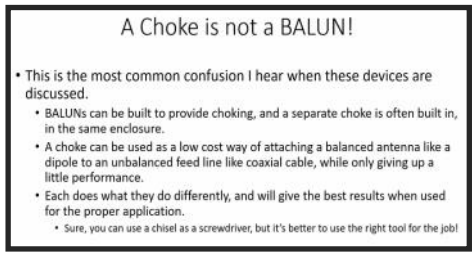
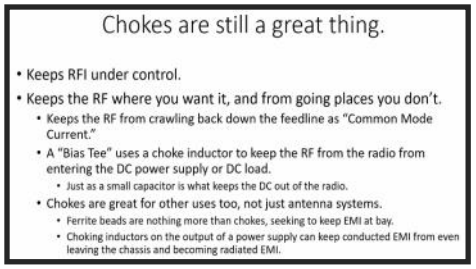
October 2022

The Big Island Hamgram

The newsletter of the Big Island Amateur Radio Club





THE PRESIDENT'S CORNER

K0BAD

Almost Category 5

I can't help but wonder about emergency communications in Florida this week. (written 10/01)

Power is out.

The cellphone system is inoperative. The media is active – but they have not been helpful in informing us of any organizational emergency needs.

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NH6ET gets the gang 'All Wound Up!' over BALUNs, UNUNs, more

William Polhemus, NH6ET, treated members to a user-friendly seminar on "All Wound Up! An overview of BALUNs, UNUNs, impedance transformers, and chokes" at the BIARC monthly meeting Sept. 10 at the Keaau Community Center and live on Zoom.

During the PowerPoint presentation, he offered many explanations, definitions and tips, and corrected prevailing misconceptions regarding which-is-which, and what-is-for-what, usage-wise.

Focusing on a closeup photo of an apparatus labeled "big, ugly BALUN," he grinned and said, "that's not a balun at all … it's a choke."

Simply put, a BALUN is an autotransformer.

Early on, he noted that "Maxwell's Equations" are the electrical engineer's "version of the bible." (Maxwell's Equations are a set of 4 complicated equations that describe the world of electromagnetics. These equations describe how electric and magnetic fields propagate, interact, and how they are influenced by objects.)

RFI, or radio frequency interference, was a key focus of the presentation. And this is one of the arenas where chokes do their thing, keeping RFI under control.

"Chokes keep the RFI where you want it, and from going places you don't," he said.

"Chokes keep the RF from crawling back down the feedline as 'Common Mode Current," he offered as one example.

William opened up the program to questions and show-and-tell, inviting folks to show related devices that they have made or purchased.

Jim Huntley, WH6FQI, brought three that he had built: an UNUN, along with a smaller version of it, and a toroid. He showed them online, then passed them around the room for folks to inspect.

Using Jim's handiwork as an example, William re-emphasized that "these are simple

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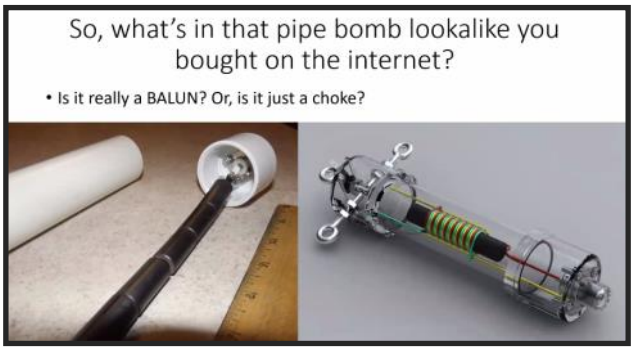

At left: Jim Huntley, WH6FQI, shows three devices he built: an UNUN, along with a smaller version of it, and a toroid.

BIARC meets Sept. 10 at Keaau Community Center.

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components we're talking about." No need to get overwhelmed, he had pointed out at the start of the session.

Tony Kitchen, WH6DVI, encouraged us to participate in the Oct. 1 statewide ARES emcomms training, "an extreme tsunami exercise."

President Les Hittner, K0BAD, noted that three board positions (1 one-year and 2 two-year terms) will need to be filled for next year. Interested? Contact William, who is serving as Elections Committee chair. Voting will be in November at the second of our twice-a-year membership meetings. Also at that time, the board can present other items for members' consideration.

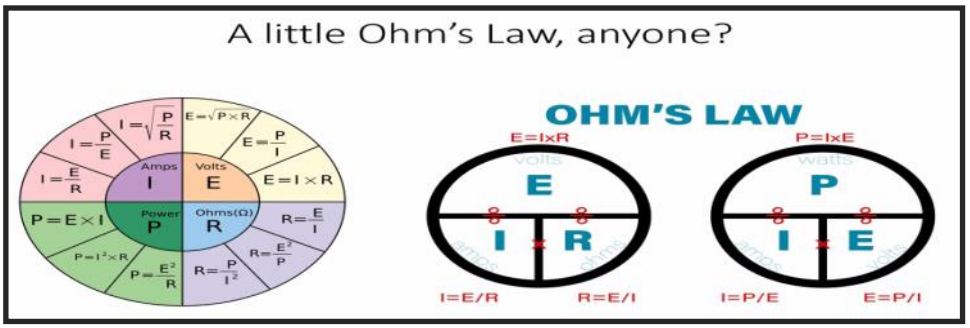
THE PRESIDENT'S CORNER

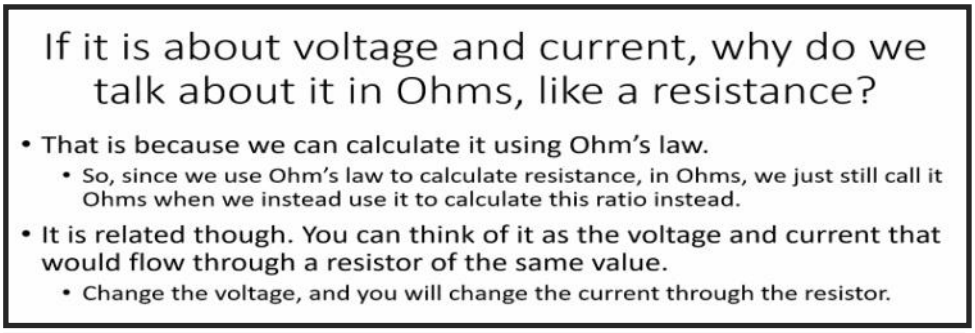
From Page 1

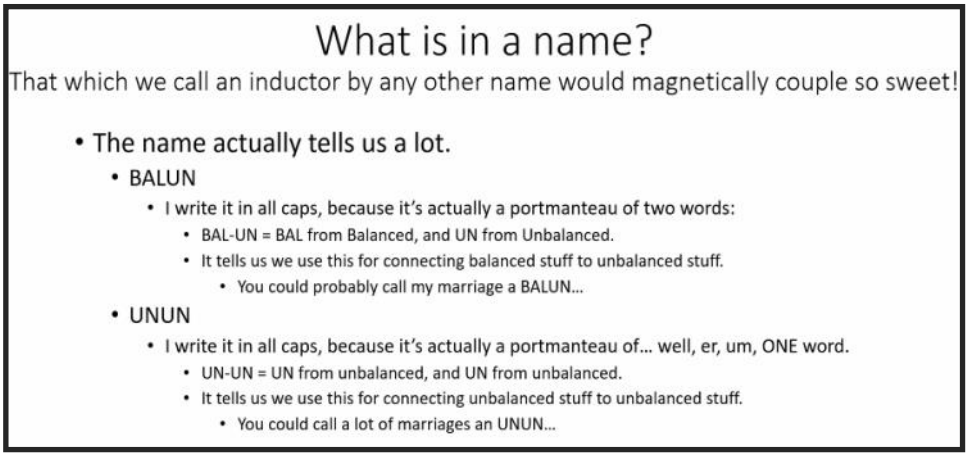
Are government radio systems operational? If so, to what extent? I've only seen one email from the ARRL requesting higher data rate authorization from the FCC – and that was sent prior to Ian's arrival.

So, what's happening in Florida? My guess is that it is a lot like it was in Puerto Rico during Hurricane Marie. Most repeaters will be off-line. Many home antenna systems will be severely damaged. Amateur emergency communications inside Ian's destructive path are probably by the use of handhelds and simplex channels.

Remember: True emergencies are those incidents that we are NOT prepared for. Our EMCOMM training, therefore, has to be flexible and adaptable. It must be easily implemented and simple. In my opinion, ARES has forgotten that.







But, as ARES members, we are not alone. HCCDA too, has a very complex local EMCOMM plan that doesn't seem to address the ground-truth requirements of emergency communications.

Winlink may be well suited for communications into and out of an emergency area, but it is no good at all within that emergency area. That's where the handhelds and voice communications skills will be needed. That's where temporary and easily moved portable repeaters will be needed. And that's where the ability to form an effective and needed communication network quickly and in real time is vital.

Our emergency communications exercises are not building

those skills. SET is not training those skills. We merely sit at home in our comfortable ham shacks and send fake messages on a complex communications system that is part of a pre-arranged network structure that we cannot even guarantee will exist or be possible – or even be needed - during the emergency.

What are we missing? I guess we will find out when WE have to deal with an Almost Category 5.

BIARC Executive Board Meeting

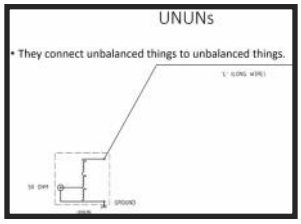
September 10, 2022

A Begin Meeting

- **Call to Order –**
  - The meeting was called to order by Board President Leslie Hittner.
  - **Quorum Call**
    - Seven board members in attendance, 6 physically present and one via Zoom.
- **Secretary's Report and Minutes (8/13/2022)**
  - Joe **moved** and Gary **seconded** that the August BIARC Board Minutes be approved as published. Motion **passed**.
- **Treasurer's Report**
  - New Associate member paid dues.
  - William **moved** and Jim H. **seconded** that the treasurers report be approved as submitted, subject to audit. Motion **passed**.

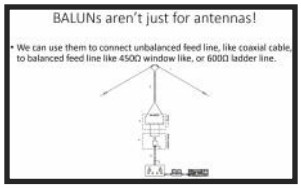
B Members Present

- Members present: AH6EI (via Zoom).



C Committee Reports

- Digital Systems verbal report.
  - A Ubiquity Bullet has been purchased for the Pepeekeo site for use with a yet to be sourced 60 degree sector antenna. William has an antenna vendor in mind and will look into the procurement of the antenna.
- Education and Outreach
  - Lending library cart needs to have two fixed wheels to make it easier to move. Doug Wilson will be asked if he could make that modification.
  - Les would like to make two requests of the county. First, Ask if we could use an existing cabinet in the facility. Secondly, to leave the lending library cart at the community center if the first request is denied.
  - William **moved,** Tony **seconded** that we authorize Les to contact the county Parks and Recreation to make the requests mentioned above. Motion **passed**.



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Stick with current BALUNs

- From DX Engineering - *Current baluns, rather than voltage baluns, should be used whenever possible. Current baluns provide better balance and often have lower loss. Current baluns, especially 1:1 ratio baluns, tolerate load impedance and balance variations much better than voltage baluns. Current baluns can also be used as isolators or un-un's.*

From previous page

- Operating Activities
  - Discussions have begun on winter field day.
  - Gary **moved,** William **seconded** that we rename the "field day funds" to "operating activities". Motion **passed**.
- Programs
  - This month will be "Baluns and UnUns", presented by William.
  - October's program will be on a fox hunt receiver, presented by Les.
  - November is the business meeting,
  - December will be the Christmas party.
  - Committee will look outside the club for presenters.
- Public Service and Communications
  - Tony would like to step down as chair of this committee due to other time demands.
  - David Miller will be asked if he would be interested in becoming chair.
  - An updated list of BIARC operators available in disaster needs to be submitted to Civil Defense per our MOU with them.
- Repeater Committee
  - Committee meeting was held.
  - All equipment with the exception of the antenna mount for the Kulani side of the link has been acquired. The mount should be fabricated by the end of the year. We can install the Pepeekeo side of the link before the Kulani mount is ready. We are looking to schedule the Pepeekeo installation. We can also do the Arden Mesh install at same time.
  - The UPS for the Pepeekeo repeater can be installed. We can do a site survey for the Microwave link at the same time. This is a good opportunity for members to visit the site. Members will meet at HCC parking lot by the new Solar charger. At 1:00pm Saturday.
  - William discussed options to improve receive for the 76 repeater and simulcast to Na'alehu and lower rift zone.
  - Tony **moved,** Joe **seconded** that we accept the donation of the DR2x repeater, Antenna, and Sinclair Duplexer from Les pending the approval of the repeater location. Motion **passed**.

D Old Business

- Possible change of insurance vendor tabled.

E New Business

- Discussion of need for storage space for equipment and records.
- William **moved,** Tony **seconded** the creation of an ad-hoc committee, chaired by William, to explore storage options near term and long term. Motion **passed.**

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From previous page

- Board member recruiting is needed.
- Joe **moved,** Tony **seconded** the appointment of William to run the ad-hock elections committee. Motion **passed.**

There being no further business, Les adjourned the meeting at 13:40 pm HST.

Respectfully Submitted,

James R. Huntley, Secretary

Next meeting is Saturday, October 8

The Big Island Amateur Radio Club will continue with in-person meetings at the Keaau Community Center at 2 p.m. on Saturday, October 8.

In addition to the face-to-face session, the event will be shown on Zoom. A Zoom invite will be sent out on the BIARC Listserve on Friday, October 7.

All Amateur Radio operators are invited.

The BIARC Board will meet at noon, also on Zoom.

BIARC sends condolences to Chuck Epperson and family

Chuck Epperson, AH6SC, who had his home burn down this year in Hawaiian Paradise Park, has now had his wife Val pass away. She died on Sunday, Oct. 2, in the evening in a Honolulu hospital.

She will be cremated and a family service will be held -- probably in January when family members from Australia and California can come to Hawaii. Chuck's mailing address on this island is P.O. Box 4220, Hilo, HI 96720. Our condolences go out to Chuck and the family.

For many years, Chuck, an employee of Tripler Army Hospital on Oahu, would ferry QSL cards for me between Oahu and the Big Island when I served as the manager of the Hawaii QSL Bureau. His assistance to me, personally, and to the members of BIARC, was invaluable.

Barbara Darling, NH7FY

All hams invited to sign in to monthly Volcano CERT/VERT Radio Check Net

All licensed amateur radio operators are invited to sign in to the Volcano CERT/VERT Radio Check Net at 9 a.m. on the second Saturday of each month. Format: The net starts promptly on **the Volcano Repeater at 147.260 MHz; (pl 103.5 on the input only, i.e., transmit only).**

At the end of the regular two-round format, participants QSY to the net's alternate repeater, **442.150 MHz (Kulani Mauka; pl 100.0),** for roll call and signal reports.

"We then close this portion of the net and QSY to the Volcano CERT/VERT **146.490 MHz** simplex frequency for another roll call and signal reports," explained coordinator Doug Wilson, KH7DQ, who serves as net control.

"The purpose of this net is to 1) check our equipment, 2) test your ability to reach the Volcano Repeater, 3) check signals from various locations in the Volcano area and the East side of Hawaii Island, 4) have a short open discussion in a 'normal' two-round net format, and 5) practice switching to our alternate emergency frequencies.

"Everyone should make sure that their radios are programmed with the above frequencies, offsets and pl tones," said Doug. "See you on the air."

JS8Call turns FT8 into a 'chat' mode

Growing group of isle hams on nets open to all

Joe Rosenbaum, WH6FZH, encourages all interested hams to participate in weekly JS8Call nets.

JS8 is an amateur radio digital communication mode based on FT8. It is popular among amateur radio operators for its ability to send and receive messages despite challenging propagation conditions, high noise environments, low power operations (QRP), or even compromised antennas.

The JS8Call application is designed for sending and receiving using the JS8 digital mode. JS8Call turns FT8 into a "chat" mode, allowing stations to send longer messages "keyboard-to-keyboard."

JS8Call can be thought of like a very weak-signal radio broadcast form of 'e-mail' (though it is not e-mail), where operators can check their message inbox and reply later.

Messages can also be sent out to be relayed through other operators to reach a recipient operator. JS8Call conversations can be had in real-time, which is how the local nets use it in a group setting.

JS8Call is designed as an HF mode, but (as with any amateur radio mode) can also be used on VHF/UHF if desired.

JS8Call was created by Jordan Sherer (KN4CRD) and first released January 04, 2019.

Later releases of JS8Call added more features to the mode, such as higher-speed transmissions.

This is the official web page, **http://js8call.com/**

"A couple of years ago, Lawrence Byng, LB, WH6GGO, ran a proof-of-concept JS8 net in the Hawaiian Islands to assess the viability of JS8 for running a net.

"At the time there were extremely limited resources available, so LB experimented with the different ways to run a JS8 net and ended up developing an open source python application called JS8-Net to run the net," Joe explains. "In May of this year, LB decided to go for it and started a twice-weekly JS8CALL net on 40 meters HF.

"The nets have proved popular with stations across Hawaii, including many ARES operators from the Big Island and Oahu," said Joe.

Due to the popularity of the nets, in August Joe added a Friday JS8 net, so now there are 3 nets per week. LB's goal is to eventually have at least one JS8 net per day across the Hawaiian Islands. At present the adoption of JS8 looks very encouraging.

LB's software program facilitates running a JS8CALL net. Quite frankly, it is an excellent program that eliminates the need to do much typing as NCS and makes running the net a breeze. This is a link to his program, **https://github.com/gh42lb/js8-net.** The application is an amalgamation of the expertise and techniques that LB has learned so far in running a JS8 net and makes running a JS8net very straightforward and fun.

"LB's nets are Tuesday and Thursday evenings at 6:30 pm HST on 7.095 USB with an alternate frequency of 7.070, said Joe.

"I was encouraged by LB to learn the JS8Net software and run a net of my own, which is on 7.070 USB on Friday evenings at 8:00 pm HST, with an alternate frequency of 7.095.

"It is very important to sync your computer time clock with an internet time server or a GPS time signal.

"One thing I was impressed by is during a RTTY contest with signals all over the digital portion of 40 meters, I was able to run a net and everyone was able to send and decode messages using very small bandwidth (500 Hz) while using empty offset areas on the waterfall," said Joe.

Great ShakeOut

[HawaiiARES] Saturday, October 15, 2022 Great ShakeOut

To all,

We just completed the October 1, 2022, Simulated Exercise Test (SET), Kai a Pele, Extreme Tsunami Drill. The result of this drill is still being collected. This was the third statewide drill. The first one on April 16th was the statewide flood, the second on July 16th was the statewide hurricane drill. The fourth and final for 2022 will be on Saturday, October 15th, the Great ShakeOut.

The Saturday, October 15, 2022, Great ShakeOut will be held between 9 a.m. and 10 a.m. HST. This will be a Winlink exercise only for those who have Winlink capability.

The exercise will be based on a real 6.2 earthquake that occurred at around 10:58 a.m. on Sunday, October 10, 2021, off the Big Island that was felt throughout the State. However, this exercise scenario will be located inland in the Volcano National Park. A simulated 7.2 moment earthquake will occur at 8:55 a.m. HST resulting in various simulated damages on the Big Island and felt throughout the State of Hawaii. No simulated local tsunami will be generated.

The exercise objective for Hawaii Hams, who have Winlink capability, is to submit one DYFI report to the USGS with a cc to KH7HO and dyfi@vccomm.org, any time between 9 a.m. and 10 a.m. on Saturday, October 15, 2022. Also, in the Additional Comments box at the bottom of the form, please indicate how you are submitting the report via what mode, which gateway and your callsign, e.g., "Submitting this report via the AH6VG VARA FM gateway, KH7HO".

Hint: The closer you are to the epicenter of the simulated earthquake, the stronger the effects of the simulated quake should be reported as well as simulated damages should also be reported on the DYFI form. No exercise injects will be sent out.

The USGS DYFI form can be found in Winlink Express, click on Message, click on New Message, click on Select Template, under Standard Templates, scroll down to USGS, then click on USGS DYFI.tex. TheDYFI form is attached below.

Mode to be use will be VARA FM, VARA HF, Packet, Pactor, or Telnet.

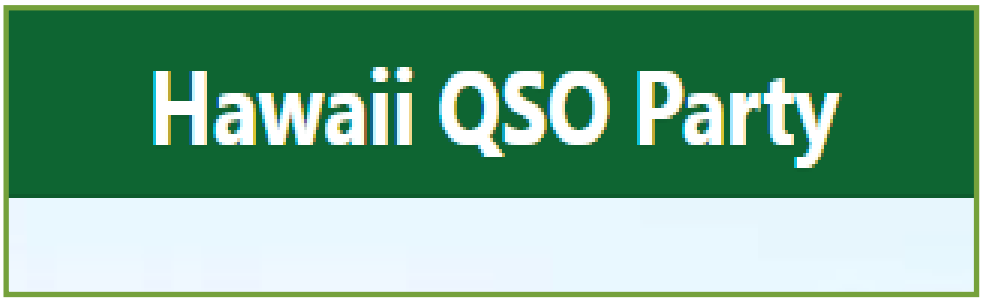
Hope those with Winlink capability will be able to participate in this easy exercise. It should take less than ten minutes to complete and then you are done.

Last year we had all four counties were represented and thirty-seven radio operators participated. Let's see if we can exceed last year's participation. Have fun with this exercise.

In a real earthquake, remember to duck, cover and hold on!

Request widest distribution of this email.

Aloha,
Clem Jung (KH7HO)
Pacific ARES Section Emergency Coordinator



Hawaii QSO Party Final Results

Aloha, from ARRL Section Manager Joe Speroni, AH0A:
Here are the HQP results hot off the press from HQP Chairman, Alan Maenchen (AD6E/KH6TU). It really was a surprise that close of to half of all Hawaii station QSOs were CW, next was Digital and SSB.

Here's the QSP from Alan:
https://www.hawaiiqsoparty.org/results/

While we only got 27 logs from HI, log analysis shows that 85 HI hams were active in the HQP. For the first time, Lanai (LNI) was active.

Some other stats:

272 logs received
3,138 calls signs reported in the received logs
CW QSOs reported: 3,709 (48%)
Digital QSOs: 2,205 (28%)
SSB QSOs: 1,856 (24%)
Total QSOs 7,770

Band conditions:

160: no reported QSOs
80: 39 QSOs
40: 1,306 QSOs
20: 5,113 QSOs
15: 1,276 QSOs
10: 36 QSOs

This tells the propagation story. We suffered rather poor conditions that weekend.

73, Alan AD6E

ARRL Pacific Section
Section Manager: Joseph Speroni, AH0A
ah0a@arrl.org

Crossband Activation of Battleship Iowa's NEPM Scheduled in Memory of Pearl Harbor

As the representative of the National Museum of the Surface Navy at Battleship Iowa Museum in San Pedro, Los Angeles, California, the Battleship Iowa Amateur Radio Association (BIARA) will honor the sailors and ships previously homeported in San Pedro who were attacked on December 7, 1941, with special crossband activations of NEPM, the active duty call sign for the Battleship USS *Iowa*, on December 6 and 7, 2022.

When Pearl Harbor was attacked on December 7, 1941, seven of the battleships formerly homeported in San Pedro Bay were not present. Eight Pacific fleet battleships (USS *Arizona*, USS *California*, USS *Maryland*, USS *Nevada*, USS *Oklahoma*, USS *Tennessee*, USS *West Virginia,* and USS *Pennsylvania*) were at Pearl Harbor and absorbed the brunt of the Japanese attack. Of these eight ships, three sank, one capsized, and four suffered varying degrees of damage.

With authority from the Navy and Marine Corps Spectrum Office Southwest, we will transmit using the *Iowa*'s NEPM call sign on assigned military frequencies and listen for calls from the amateur radio community in their adjacent bands. NEPM will transmit on 14.375 MHz, 18.170 MHz, and/or 21.460 MHz on J3E upper sideband and/or A1A CW. The operator will advise listeners as to where they are listening. Amateur participants are reminded not to transmit on the NEPM military frequencies.

Operations on both days are expected to be from 1500 to 2400 UTC. QSL procedures can be found at https://biara.org. For specific questions in advance of the operation, contact w6hb@biara.org. Thanks to BIARA for this story.

Clifton L. Leonard, KH6SJ, SK

Clifton L. Leonard, 41, of Hilo, died Sept. 13 at Hilo Medical Center. He was born on July 2, 1981 in Hilo.

He was a US Navy veteran; a member of ARRL, the American Radio Relay League, and a former member of BIARC.

His call sign is listed on ARRL.org as KH6SJ, previously WH6SJ, which was the call sign of his father, Clifton Leonard Sr., who is also deceased. https://www.dodomortuary.com/obituary/clifton-leonard

A Memorial Mass was held Sept. 26 at Pahoa Sacred Heart Catholic Church. He is survived by his mother, Maria (Elfie Knecht) Leonard; 5 uncles, 4 aunties and many cousins.

Hurricane-prep brochure

Here is an updated link for the Hawaii County hurricane prep brochure from Bob Schneider, AH6J: https://records.hawaiicounty.gov/weblink/1/doc/115962/Page1.aspx

Girl Scouts Receive ARRL Radio and Wireless Technology Patches

On Saturday, September 10, 2022, the York County Amateur Radio Society (YCARS) in Rock Hill, South Carolina, helped 22 Girl Scouts earn their ARRL Radio and Wireless Technology patch.

Created in 2016, the Radio and Wireless Technology Patch Program offers Girl Scouts opportunities to learn about wireless technology, including amateur radio. Girl Scouts are encouraged to participate in activities that help them gain knowledge and skills in careers and subjects that involve science, technology, engineering, and mathematics (STEM). The program activity was part of the Girl Scouts Love State Parks annual event. YCARS Outreach Coordinator Vicki Carnes, AD3I, and six other club members presented the program. Other amateur radio operators were available to help the Girl Scouts get on the air and communicate using amateur radio.

Club Grant Application Period Open Until November 4

The ARRL Foundation Club Grant Program opened a second grant proposal period which began September 7, 2022, and runs until November 4, 2022, at 7 PM Eastern Time. Radio clubs can apply now, and information about the program can be found on the ARRL website at www.arrl.org/club-grant-program.
Following the first proposal period that ran earlier this year, 128 clubs applied for grants with a variety of outstanding projects. Emphasis is placed on projects that have a component of community involvement, training, new ham development, and club revitalization. Twenty-four clubs were chosen and nearly $270,000 was awarded.

Clubs that applied in the first round and did not receive a grant are urged to reapply. The ARRL Foundation will award an additional $230,000 in grants at the end of the second application round.

An informational webinar was held on September 7, and a recording of that event can be seen on ARRL's YouTube channel at https://youtu.be/ZNvc_eeIlwU.

Announcements

The Palo Alto Amateur Radio Association (PAARA) will celebrate their 85th anniversary on October 29, 2022, at Memorial Park in Cupertino, California. PAARA was founded in 1937, and is dedicated to improving the skills of radio amateurs for recreational purposes and emergency communications. The event is open to everyone and will begin at 10:00 AM PT. PAARA will operate a special event station with the call sign, W6P. In addition, two HF stations will be operating along with a Get on the Air (GOTA) station. There will be a special ARRL presentation at 1:00 PM PT. Visit the PAARA website, www.paara.org, for QSL card information and further details about the event.

Slow Speed CW Net (HSSN) is open to Hawaii hams

Aloha, from ARRL Section Manager Joe Speroni, AH0A:

Amateur Radio benefits from so many volunteers helping us learn new operating skills and technologies. I'd like to list those that I know but it would be too long. Next time you get support from a ham friend make sure they get recognition. Volunteerism is what makes Amateur Radio a viable radio service!

There are successful teaching groups like http://CWOps.org that can get a student copying the letters and leaves the student to themselves to develop the ability to chat with others. To develop those skills, students need time on the air with hams that will slow down to their current skill level — PSE QRS often leads to SRI HAVE TO QRT.

Warren Munro (KH6WM) has stepped forward to launch a slow speed CW net for Hawaii hams. He and other net NCS helpers are volunteering their time to help build newcomers skills.

Here is Warren's announcement.

To All Hawaii hams:

If you have 40-meter capability and have learned Morse Code, the Hawaii Slow Speed CW Net (HSSN) can help you improve your CW operating ability by providing on-air experience in an informal setting.

Net sessions are called up twice a week on 7118 KHz (alt frequency 7114 KHz) at 4:30 PM local on Wednesday afternoons and at 9 AM on Saturday mornings.

All are welcome to check in. Code speed is adjustable by NCS to accommodate all stations.

Warren KH6WM is the HSSN Net Manager. For further details on the Net or on Net procedures, he can be reached at KH6WM@arrl.net or 808-487-1863.

ARRL Pacific Section
Section Manager: Joseph Speroni, AH0A
ah0a@arrl.org