

# ~ Noon BIARC Board meeting; ~ 2 p.m. membership

program. Details on Page 4, and BIARC ListServe.

Meetings

on Zoom

Set for Saturday,

August 8:



Jim Kennedy, K6MIO, takes on the subject of "Solar Minimum Propagation Indices" from his new QTH in Florida during the July BIARC gathering on Zoom.

# The search for solar truth

**Longtime Hamakua** ham, BIARC stalwart and Hawaii Island observatory scientist Jim Kennedy, K6MIO, was the guest of honor at July's BIARC Zoomathon.

About a year ago, Jim and wife Linda, WH6ECQ, left their QTH of 22 years in Papa'ikou mauka and headed back to St. Augustine, Florida.

They're happy to be settled near their adult children, but "There's no place like Hilo," says Jim.



A while back, friend Mel Uchida, KH6EKD, sent him an email questioning the validity of currently used solar indices.

Jim, noting that he had dabbled in "solar stuff" back in his graduate school years, agrees with Mel that something's amiss with the indices.

Continued on next page

# The **President's** Corner

# Plan, Prepare, **Execute, Assess**

"Insanity is doing the same thing over and over and expecting different results." Definition of quantum insanity (often misattributed to Albert Einstein.)

It's called "The **Operations Process.**" Plan, Prepare, Execute, and Assess.

So goes the cycle familiar to all engaged in emergency management. The cycle is ubiquitous. Almost as ubiquitous is the failure to feed the output back into the input -- it is a feedback cycle after all.

The assessment of the last run of the process should be the start of the planning for the next incident. Einstein may not have said it, but I will: if you use the same plan

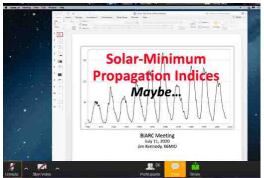


# William Polhemus, NH6ET

over and over again expecting different results, you're insane.

It's been some time since Hurricane Douglas delivered us a really bad light misting and some horrendous warm breezes with occasional sunshine. **Evidently when Douglas** was told that he had to quarantine for 14 days he decided to go elsewhere. Humor aside, in the week leading up to the storm the threat was very real. Plans were dusted off. Preparations were made. But, the plan was never fully executed. It doesn't

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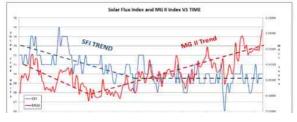


In his presentation, Jim focused on the issue and work being done by Jerry Spring, VE6TL, and others of hamsci.org, the Ham Radio Science Citizen Investigation. (See accompanying selections from his Zoom talk.)

# Comparing SFI to Mg II

Near Solar Minimum

- · VE6TL used daily Mg II data to look for a trend: Up or Down.
- . Starting from Jan 1, 2020 it shows a down trend.
- · However, from Feb 20, 2020 it shows a up trend.
- It <u>might</u> signal the start of Cycle 25.
  - Traditional solar indices do not show this yet.



# The President's Corner

From previous page

matter though; it's still time to assess.

Myself? I dusted off my plan on July 22. At that time it was looking like Douglas would be visiting Ka'u. Based on the reputations of weathermen around the world, I knew that I could rule out the storm hitting Ka'u. I ran through the checklists (for work, and for home.) The checklists were helpful, as always.

Due to a lesson learned in previous cycle I double checked each of the generators. I made sure each was fueled and full of oil, and test ran each of them. Checking generators paid dividends too. One of the generators, a very important one, had a suddenly faulty battery. It was an easy fix and I was glad we didn't have to do it by flashlight. Even though it wouldn't have been an issue in this storm, Hilo loses power a lot.

Usually right after I fall asleep.

President's Corner: Continued on page 4

## Solar "Cycle" Basics

· Cycle Life: One Minimum, to the next Minimum

- Duration: 9 years to almost 14 years
- Average: 11 years
- Cycle Peaks: How many can they have?
  - · Single-peak maximum, while others have a
  - · Double-peak maximum
    - · Activity stretches out longer, but the MUF peak is lower.
    - NOTE: Double peaks occur when the Sun's northern and southern hemispheres are partly out of phase.

# From previous page

### Solar Cycle Propagation Indices

The Traditional Ones

- There are a few common MUF indicators
  - Rz: Zurich number weighted mean of spots & groups
- Ri: WDC-SILSO weighted mean of spots & groups (N & S)
- SFI: Solar Flux Index 10.7 cm solar radio noise
- · BUT, All Three Fail Near solar minimum
  - Which is about 40% of the full solar cycle time!
     As many as 800 days without sunspots.
- . Still: The MUF continues to have ups and downs.
  - But, we haven't had a useful solar index to track it.

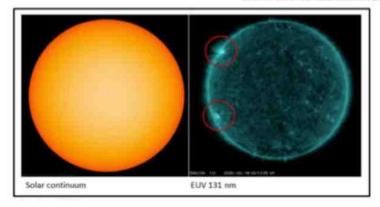
# Illustrations courtesy Linda Quarberg, WH6LQ

# Seeing in a "Better" Light

An Example - Same Day Comparison

Left Side: Visible light - No Visible Activity or Structures

Right Side: EUV light – Clear Solar Events on left limb Lots of other surface structures



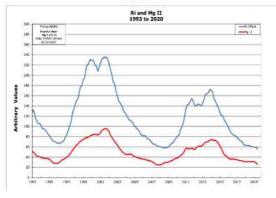
# A Search for Another Index

Hams to the Rescue?

- HamSCI (Ham Radio Science Citizen Investigation)
  - · Volunteer ham scientists, and other interested hams
  - They have many projects, lots of email and Zooms and from there...
- VE6TL started a solar-minimum MUF search.
  - MUF responds to usual solar indices, but only to a point.
  - · Still, the MUF still goes up and down, even near Minimum.
  - Maybe: Visible Sunlight is not sensitive to lower ionization?
- So, he searched the known solar ultra violet (UV) bands, for solar events that visible light never sees.

# Ri Index and Mg II Variations

My Version



Solar: Continued on next page

# **About HamSCI motivation**

Since the beginning of the United States amateur radio service in 1912, amateur radio operators have made significant contributions to radio technology and the understanding of radio science. This work must be continued today, as Part 97 of the FCC rules states that a primary purpose of the amateur radio service is the "Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art."

Recent advances in the fields of computing, software defined radio, and signal processing provide unprecedented opportunities to meet this mandate, specifically in the field of radio science. These opportunities are already beginning to be realized with the advent of systems such as the Reverse Beacon Network (http://www.reversebeacon.net/) (RBN), the Weak Signal Propagation Reporting Network (http://wsprnet.org/) (WSPRNet), and PSKReporter (https://pskreporter.info/).

In addition, enabling amateurs to make and contribute legitimate scientific observations will expose amateur radio to a wider community of people interested in science around the world.

# What is HamSCI?

HamSCI, the Ham Radio Science Citizen Investigation, is a platform for the publicity and promotion of projects that are consistent with the following objectives:

- ~ Advance scientific research and understanding through amateur radio activities.
- ~ Encourage the development of new technologies to support this research.
- ~ Provide educational opportunities for the amateur community and the general public.

HamSCI serves as a means for fostering collaborations between professional researchers and amateur radio operators. It assists in developing and maintaining standards and agreements between all people and organizations involved.



# **VE6TL Found A Better Light!**

- · He discovered that geophysicists and climatologists
- track another, but similar, solar **UV line**.
   Emits from solar magnesium ions, at 280 nm (Mg II) · From a satellite, it is bright, and, its on the web.
- · So, he began tracking these and continues.
- - He saw an *increase* in the line strength *and* the *MUF*!
    So, he looked backwards to compare more data.

  - It might be real.
- He compared SFI to Mg II for comparison.
- I did the same thing, using Ri and Mg II.
- · Both approaches seem to track quite well.

# What is HamSCI's scientific focus?

HamSCI was started by ham-scientists who study upper atmospheric and space physics. These scientists recognized that projects such as the Reverse Beacon Network, WSPRNet, PSKReporter, DX Cluster, ClubLog, and more are generating big data sets that could provide useful observations of the Earth's ionosphere and related systems. Because of this. HamSCI's initial focus is on these fields of research. In the future, other researchers may join HamSCI and broaden its scope.

Above: Jerry Spring, VE6TL, of hamsci.org.

Photo courtesy Calgary Amateur Radio Assoc.

#### Summary

It will take time, and more observation, to see if :

- Mg II (or others) will track the MUF in the long term.
- If so, does mark the "actual" Minimum date of the cycle
- If either of these turns out to be valid, and reliable, it would be a real break through.

If it works, it would mostly affect the F-region MUF.

ONLY TIME and PATIENCE will tell.

# As for Me...

- . In a very small way, I'm collaborating with VE5TL, by processing historical data using another traditional solar index:

And the new-found,

· Solar UV Mg II line.

And whatever .....

# It's a hobby - right?

#### Winding Up, for Now

- · As just mentioned, VE6TL (and others) saw a shortterm increase in Mg II, and
- · It actually showed a weak MUF increase.
- It will be interesting to see if the Mg II continues to trend upward.
  - (The timing is about right!)
- · There is still much to do in to draw hard conclusions.

#### Time will tell!

#### Mahalo!

Acknowledgements

The author wishes to express his appreciation to:

- · Spring, J (VE6TL), (2020, Private communication )
- · HamSCI for providing the venue for exploration.
- · Solar data from SILSO at the Royal Observatory of Belgium (Brussels)
- Mg II data from UV satellite data and the science group, University of Bremen
- $\hbox{@ 2020 HamSCI.} \quad \cdot \ \hbox{\scriptsize BIARC for the chance to try to explain what I \it think} \ \hbox{\scriptsize is going on.}$

# The President's Corner From page 2

One newer part of my plan is the proactive removal and storage of my many antennas. I actually vacillated on this for several days before deciding to just do it. I love being on the air, and taking down all of my HF antennas would relegate me to 2M/70CM voice, which is not exactly my thing. On Saturday July 25, about 12 hours before the storm was to arrive, I bit the bullet and took them down.

It was a lot of work. However, rebuilding all of them last year following a lightning strike was so much more work. I didn't want to go through that again. A short time without them would be better than having them all get mangled.

After all that work, it might seem like it had been a waste of effort. However, as I assess my response to Douglas, I am adding the removal of my antennas as a high priority item on my checklist to be used in the next plan. In taking them down for Douglas, I gained practice, and I learned some valuable lessons.

I found that several of the construction methods didn't lend themselves well to a speedy removal. I had some knots in dacron support rope seize up tight. I found that when coiling up paracord if it inadvertently slides between LMR400 and the mast it is secured to it will grind right through the jacket of the cable, exposing the braid, but only makes a little shiny spot on the mast.

And, I learned that I can't go more than 8 hours without an HF antenna before I get all 'trainspotty.' I also learned that taking down the antennas in preparation of the storm presents a great opportunity for maintenance. Conditions which would otherwise go unnoticed are now at eye level. I found a corroding terminal at the feed point of my doublet. It seems

that the OEM stainless washers used were really chinesium plated. I found rust in one of the mast bases. And I found a ground loop between my transceiver and my laptop's docking station. I am glad to fix these issues. What I really mean is that I am glad to be forced to fix these issues. They've been there for a while. I just didn't know it.

I've learned some lessons. My station and I will perform better next time; I've seen to that. The stainless carabiners in place of the seized knots will certainly be easier to remove when the time comes. The greased up REAL stainless washers will be corrosion free. And between now and then the new storm resistant antenna I put up eight hours after taking the others down will certainly find any other ground loops in my station.

I encourage everyone to assess your plan. Assess your actions, and their outcomes. And, if you had no plan or took no actions, assess that decision too.

Myself? My updated plan is ready for Elida.

BIARC August Zoom topics will include recognizing and reporting on weather conditions; Hawaii QSO Party This month's BIARC Zoom program at 2 p.m. Saturday, Aug. 8, will be on Skywarn, and presented by Kevin Bogan, AH6QO.

He will provide valuable information and tips for all, whether you want to be involved in Skywarn or not.

Even CERT people are asked to do weather reports, so it should be a good session, says Program Committee chair Jim Huntley, WH6FQI. There will be something for everyone to learn.

Also, Alan, AD6E /
KH6TU, will be
speaking briefly about
the Hawaii QSO Party.
https://www.hawaiiqso
party.org/
(See story about the
Hawaii QSO Party on
Page 7 of this
newsletter.)

# And the subject is: Morse Code, aka CW

~ Les Hittner KOBAD reports on a BBC episode that discusses the invention of Morse Code. Les found it quite interesting, and recommends it to others: https://www.bbc.co .uk/sounds/play/p0 33k3g8

~ Stan AH6KO shares info about a local CW (Morse Code) opportunity:

Hawaii hams who want to practice making CW contacts on the radio can QSO with Lloyd KH6LC or me, Stan AH6KO.

We are on the 40 meter band twice each week: KH6LC -- Mondays -- 1900-2000 HST -- 7035-7045 KHz AH6KO -- Thursdays -- 1900-2000 HST -- 7035-7045 KHz

We call "CQ CWA" at about 20 words per minute. Call us at whatever speed you want, and we will do an easy contact with you!

"CWA" is for CW Academy, a training program from the CWOPs Club.

More info at https://cwops.org/.

# WANTED: New BIARC logo

BIARC Treasurer Tony Kitchen, WH6DVI, wears many hats in serving the ham community.

In his role as BIARC webmaster, he sends out a call for proposals for a new logo for our updated site.

Artistic amateurs are invited to send their ideas to Tony.

# Digital communications talk for Hawaii hams at 10 a.m. Saturday, Aug. 8

From BIARC Listserve:

Please consider attending the following Zoom meeting on Winlink on Saturday, August 8, at 10 a.m.

This meeting was organized by Joe Tabrah, KH6FHI.

For the October 3 ARES SET exercise, ARES will need stations with Winlink capabilities to step up and handle message traffic at designated American Red Cross shelter locations islandwide.

This is a good opportunity to get up to speed on Winlink.

73, Tony Kitchen WH6DVI Chair, Public Service Communication Committee

Interested?
Send an email requesting an invitation to:
dra-zoom@hameducation.org

[During the July BIARC virtual gathering on Zoom, Les Hittner, KOBAD, shared info about a virtual packet radio event on hackaday.io (https://hackaday.io/project/164092-npr-new-packet-radio)]

# NPR New Packet Radio

(IP over 430MHz Ham Radio, up to 500kbps, 20W RF. Extension for HSMM-Hamnet-AREDN. 100% open-source.)

**DESCRIPTION:** 

NPR (New Packet Radio) is a custom radio protocol, designed to transport bidirectional IP trafic over 430MHz radio links (ham radio frequencies 420-450MHz). This protocol is optimized for "point to multipoint" topology, with the help of managed-TDMA. Bitrate is up to 500kbps (net, effective bitrate).

The radio modem is cheap (~80\$) and home-made, with a 433MHz ISM module inside. The modem is connected locally with Ethernet, therefore no specific software is needed on PC.

The modem is easy to build and reproduce. You can add a DMR radio amplifier in order to achieve 20W radio power or more.

The main usage is an extension of HSMM - Hamnet - AREDN networks.

All the project is open-source : hardware, software, protocol specification.

**DETAILS:** 

NPR modems FOR SALE: https://www.elekitsorparts.com/ product/npr-70 Low prices (79\$ fully assembled). International shipping.







Roy Kunishige, WH6FYK, shares these photographs of his Field Day set-up in mauka Mountain View. Key photo elements: temporary tower on trailer with home-brew OCF dipole; his trailer tower deployed and ready to go, and his home-brew 10-40m OCF dipole, along with various essential components.











# It's Hawaii QSO Party time

Aloha,

Alan (AD6E), the HQP Chairman, reminds us the Hawaii QSO Party is this month. HQP is the one HF event where stations worldwide point their antennas at us. It is an opportunity for more modest stations to fill out their WAS and DXCC lists. There are many still looking for a KH6 confirmation.

It is a low-key contest, a fun event, with contacts having a chance to chat a bit about Hawaii instead of highpressure competition.

Here's Alan's invitation. And take a look at Alan's new web site. I especially like the new Hawaii multiplier maps making it easy for Hawaii stations to figure out their multiplier. Well done, Alan!

"Please save the dates: Aug 22-24 for the Hawaii QSO Party

https://www.

hawaiiqsoparty.org/

The HQP will run from 0400Z 22 August to 0359Z 24 August. Work as many stations on as many bands and modes as you can. Complete rules:

https://www.hawaiiqsoparty.org/sample-page/

The biggest complaint I heard last year was "Where were all the Hawaii stations?" We really need YOU to get on the air and make some QSOs.

This is our one big HF event of the year and there will be a LOT of folks out there looking for HI. This event will be active for 48 hours, but no one has to be active the whole time. Think of it as a 48-hour window of opportunity. Play radio as much as you like during those hours.

A map of the Hawaii

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

multipliers can be found here: https://www.hawaiiqsoparty.org/ mult-map/

While most QSO parties use their counties as multipliers, here in Hawaii we only have five counties so we've expanded the multiplier list to use "districts" instead, roughly following the ancient Moku.

All digital modes (RTTY, FT8, FT4, PSK, whatever) are considered "digital," so there are three modes to use: CW, Phone, Digital.

Hopefully, the WX will cooperate and we'll have some excellent conditions.

With Aloha, Alan AD6E / KH6TU HQP Chairman"

# Amateur Radio, quake reporting and the USGS

Aloha all,

There is a lot going on in the Amateur Radio digital communications arena. Amateur Radio under the leadership of the ARRL LAX ARES group, developed a real-time data processing system using Amateur Radio digital message that captures information about earthquakes.

Working cooperatively with the U.S. Geological Survey, the sole science agency in the Department of the Interior, hams developed use of Internet to capture earthquake reports from individuals that quickly gives first responders and others info about an affected area.

For more info about the USGS follow this link to their web site.

https://www.usgs.gov/about/about-us/who-we-are

Based on an Amateur Radio Winlink message template, data from ham operators is delivered directly to the USGC database computer without the need for human intervention. It sounds complicated, and maybe the served agency s computer database and writing a template are, but the reporting system only requires training on using Winlink, something easily mastered. The worldwide Winlink system now processes over 60,000 messages per month. Over 30,000 hams already have a Winlink account. It is not hard to use!

Hawaii ARES played a major role in the first USGS exercise, which is recognized in Oliver Dully's presentation to the 71 ARRL ARES sections. With only 22 hours advanced notice, Clem Jung (KH7HO) put together Hawaii's participation of about 18 Winlink operators, a significant contribution to the project. The Hawaii Amateurs even added reporting for a real earthquake in Fern Forest on the Big Island that occurred soon after the simulated exercise. Check out Oliver's presentation PDF at http://www.hawaiiarrl.info/ stories/2020/USGS.html

Oliver is an accomplished presenter and his commentary adds a lot to his charts. Here is a link to his talk to the ARRL EmComm group: https://vimeo.com/437004042

~ ah0a@arrl.org

# QSO Today announces 70-plus free talks

# Aug. 8-9 virtual ham expo has DIY tips for hams at all levels

The first QSO Today Virtual Ham Expo, which takes place the weekend of August 8-9, has confirmed what it's calling "a packed lineup of over 70 great speakers" for the ARRL-sanctioned event. Attendance is free and registration is open on the QSO Today Virtual Ham Expo website.

Presentations will cover a range of topics, with two tracks focused on providing hands-on, practical advice for those just getting started in amateur radio.

Steve Johnston, WD8DAS, will demonstrate basic soldering techniques for repairing equipment and building projects. Marcel Stieber, AI6MS, will offer an overview of common battery types, discussing the pros and cons of each -- including battery chemistry, common uses and misuses, and everyday application tips.

For experienced operators, topics will cover new techniques, equipment upgrading, 3D printing, and more. Each presentation will wrap up with a live questionand-answer session.

Also on tap: Glenn Johnson, W0GJ, will attempt to answer the question, "Is 3 dB Worth a Divorce?" and cover a wide range of antenna topics. Jim Veatch,



WA2EUJ, will explain how to build a QRP radio. In his presentation, "The Slot Antenna -- Undiscovered Country for Most Hams," John Portune, W6NBC, will demonstrate how a satellite TV dish can be "slotted" to make an effective outdoor 2-meter or UHF antenna for use in antenna-restricted neighborhoods.

Prominent youth educator
Carole Perry, WB2MGP, will
moderate a lineup featuring
amateur radio's future leaders.
Audrey McElroy, KM4BUN, will
speak on "Getting Girls
Involved in STEM, Specifically
Amateur Radio!", while hot-air
ballooning will be the
focus of a talk by Jack McElroy,
KM4ZIA, "Highly Flying Kids
with HAB."

QSO Today 's Eric Guth, 4Z1UG, says that one challenge to any ham radio convention, whether in person or virtual, is keeping the content of presentations from becoming overly complicated and overwhelming.

"For our inaugural virtual Expo, we've made sure that there are great speakers for both beginners and experienced hams," Guth said. "We've asked all of our speakers to be laser focused on their topics while providing handson, practical advice."

# Virtual Tech License Class starts Oct.20

We will begin a new virtual Technician License Preparation Class via Zoom on October 20.

The classes will be conducted twice a week at 6:30 p.m. over a six-week period.

Please contact Doug Wilson, KH7DQ, at douscelle@aol.com if you or someone you know is interested in signing up for this class.

There is no charge for the class and all materials will be provided.

# Aloha Chapter of 10-10 International

Local hams active on 10-meters encourage amateur radio licensees at all levels to join in the fun.

[More info on the world of Ten-Ten is available on Facebook and at https://www.tenten.org]

# Washington VEs use Boeing parking lot for testing session

Parking lots may be replacing community centers, schools, and clubhouses as convenient locations to conduct amateur radio examination sessions.

On June 20, the Mike and Key Amateur Radio Club in Washington state took over a Boeing parking lot to administer tests under the ARRL Volunteer Examination Coordinator (ARRL VEC).

Volunteer Examiner Scott Robinson, AG7T, said his team had been unable to administer exam sessions since early March.

"Based upon King County and Washington State COVID guidance, we thought we could give an outdoor session using one of Boeing's parking lots in Renton," Robinson told ARRL. "That required a lot of work to organize."

Robinson said the team developed a COVID-19 mitigation plan that detailed how the examiners would address several major areas. These included health screening of VEs and exam candidates, social distancing in all aspects of the session, sanitation in setting up the test area



Volunteer Examiners at the June 20 outdoor session in Renton, WA, included K7PIA, AG7T, KL7WM, KD7IQL, KF7RWA, W7GIL and K7CMW.

[K7CMW photo]

and in session processes, and contact tracing.

"With those details agreed to, an information document was produced for the examinees that listed a set of requirements each of them needed to meet," Robinson said. "For example, no carpooling to the session. Each examinee who agreed to the requirements was then registered for the session."

Candidates had to register in advance via email, at which time they would receive directions to the exam session location and requirements.

A custom set of test booklets was produced for single use, then disposed of. "We used plastic sheet protectors to ensure minimal handling of examinees' documents by the VEs," Robinson explained. "These were also thrown away."

Examinees parked in every other parking spot, facing the VE area in the center of the lot. This allowed the VEs to supervise those taking exams by looking through car windows.

"We had 24 examinees at the session and gave 29 exams, leading to 14 Technicians, seven Generals, and two Amateur Extras," Robinson said, noting that an additional 10 candidates are on the waiting list for the next time around.

# Hawaiian Islands Grid Madness

# It's a VHF/UHF Simplex event open to all hams

BIARC member Stan
Froseth (ah6ko@arrl.net)
encourages all amateur
radio operators to get
geared up for the seventh
edition of the Annual
Hawaiian Islands Grid
Madness -- A VHF/UHF
Simplex Event set for
Sunday, September 20,
from 1300 to 1700 HST.

"Grid Madness is an onthe-air radio activity for you! And please share the invitation to anyone, especially new hams and Kauai/Molokai/Lanai hams. On the radio, tell your friends to "Google Grid Madness." Everything you need is at gridmadness.blogspot.co m," says Stan.

"Put it on your calendar!"

He points out that there are a few important changes for this year -- see New for 2020 below.

Stan, AH6KO, is the event manager and Eric, KH6CQ, sponsor, Aulani Hui ARC.

"Grid Madness is a FUN event for all hams in the



Each year Stan AH6KO selects a strange critter as the mascot for Grid Madness. Honoree for GM-7 is this gnarly undersea dude.

State of Hawaii. Test your equipment, coverage and operating skills using simplex FM on 2 meters, 1.25 meters and 70 cm. Talk to as many stations as you can, in as many Grid Squares as you can, using SIMPLEX ONLY. See who you can contact locally or across the water!

#### New for 2020:

~ Operating on Grid Boundaries -- Activating two or more Grid Squares from the same location will not be allowed this year.

- ~ Make contacts on 220 MHz -- A new band is added for your operating enjoyment!
- ~ Grid Madness Assistant -A web-based tool for your
  smartphone or computer:
  Share your location and
  channel with others!
- ~ No Printer? No Problem! -- Log sheets mailed to you.

Comments and questions: AH6KO@arrl.net.

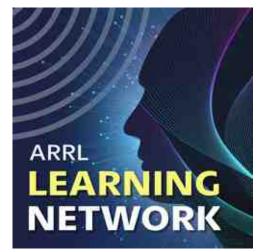


# ARRL members to lead new 30-minute amateur radio webinar series

ARRL is launching a new webinar series to help introduce more members to the variety of activities and opportunities that radio amateurs enjoy. The ARRL Learning Network will offer live presentations by member-volunteers, for members.

Like hamfest forums and radio club presentations, the webinars are intended to help participants get more active, involved, and engaged in amateur radio.

Presentations are 30



minutes each, making them easy to fit into a lunch break or as a short evening activity.

A 15-minute question-and-

answer period follows each presentation for those who can participate longer. The webinars will be hosted initially using GoToWebinar.

Webinars will be recorded, and some presentations will be available for future viewing by members and ARRL-affiliated radio clubs as part of an ARRL Learning Network library.

A running list of upcoming live presentations is available. The ARRL website is the place to register.



### BIARC Public Service Communication Committee Report June 11th - July 9th, 2020

# From the July BIARC Board meeting

#### Big Island Volunteer Organizations Active in Disaster: (BIVOAD)

The BIVOAD Communications Committee held Zoom meetings on 6/23 and 7/7 and continued to discuss ICS-205 plans, and emergency communication related topics. We want to thank Ken Cutting, KH7ZJ for acting as liaison between BIVOAD and the ARC locally.

We are seeking an amateur radio operator who would be willing to coordinate with the Salvation Army, as a volunteer to facilitate EmComm training and the ability of the Salvation Army to maintain communications when traditional modes of communication fail.

We are also seeking volunteer(s) on the Big Island who are involved in ARES leadership to join the communication committee. The committee believes that a closer collaboration with Hawaii County ARES would facilitate coordination of frequency and repeater usage, and better EmComm planning and preparation.

Please contact Tony Kitchen via email if you are interested in participating. (tonykitchen808@gmail.com)

#### Proposed MOU with County Dept. of Water Supply

No progress to report.

1

**Minutes** 

A. Meeting called to order at 1205 by President William Polhemus.

Role Call: Present (5) Quorum (4) **Board Members:** 

Present:

William Polhemus, President Leslie Hittner, Secretary Tony Kitchen, Treasurer Mel Uchida, At Large Robert Schneider, At Large James Huntley, At Large

Missing:

Paul Ducasse, Custodian Visitors:
Two non-board-member viewers were present

#### Minutes of 06/13/2020 - 6/25/2020 Board Meeting:

Tony moved and Mel seconded that the minutes be approved as published and distributed by email. Motion passed.

Treasurer's Report: The treasurer's report was submitted in writing as two reports; an Operating Statement and a Treasurer's Report

The Fund balances for the end of June 2020 are:

\$ 764.37 Repeater fund Emergency Reserves
General Fund \$1,000,00 \$1,656.03 \$3,459.23 Total Funds

The club in June added two new members for a total membership of 87. Tony is in the process of linking the BIARC PayPal account to the BIARC Bank account so we can transfer money received.

Les **moved** and Mel **seconded** to accept the Treasurer's Report subject to audit. Motion **passed** by a unanimous vote.

#### B. Committee Reports:

a. Digital Systems (Written report): James Huntley noted:

The committee has been monitoring the repeater infrastructure roll out and what digital components will be needed first. This will help set priorities for future digital projects

Jim has been working on an update for the iGate/digipeater and is researching a possible SDR iGate and considering the pros/cons of the two systems.

Should the club sponsor an APRS-IS local server?

d. Program (Written report): From James Huntley:

Ideas for upcoming months programs: If COVID cases keep trending up we may not have live meetings anytime soon.

A possibility for August would be something Grid Madness related. I'd like to have something that may spur more interest and show the club members how to make it more of an event/expedition to add a way to counter cabin fever.

James will work on Grid Madness as a program for August.

William asked about in-place meetings. Robert indicated that after August we may be able to meet at the Ke'eau Community Center. The Church, too, is a possibility, but the question remains: what sort of guidance should we follow? Tony suggested waiting at least until we get the N95 masks from BIVOAD.

William moved and Mel seconded that we make a decision about an in-place meeting for August by email in a couple of weeks. After some discussion, Les stated that the need for a unanimous affirmative vote when voting by email would not pass and suggested that instead, we should call an emergency Board meeting. Les stated that the decision should be a medical, not political decision and would prefer a full month's notice that the Community Center will be open before scheduling in-place events. The motion failed.

William stated that even when in-place meetings are possible, the club should consider a hybrid (in-place and Zoom) for a period. This means we should use a location with easy internet access and reinforcing electronics needed for Zoom

William moved and Tony seconded to do the August program meeting as a virtual meeting while continuing to research arrangements for holding hybrid meetings in the future. The motion passed

e. Public Service Communications (Written report) From Tony Kitchen:

#### Big Island Volunteer Organizations Active in Disaster: (BIVOAD)

The BIVOAD Communications Committee held Zoom meetings on 6/23 and 7/7 and continued to discuss ICS-205 plans, and emergency communication related topics. We want to thank Ken Cutting, KH7ZJ for acting as liaison between BIVOAD and the ARC locally.

We are seeking an amateur radio operator who would be willing to coordinate with the Salvation Army, as a volunteer to facilitate EmComm training and the ability of the Salvation Army to maintain communications when traditional modes of communication fail

We are also seeking volunteer(s) on the Big Island who are involved in ARES leadership to join the communication committee. The committee believes that a closer collaboration with Hawaii County ARES would facilitate coordination of frequency and repeater usage, and better EmComm planning and preparation.

William explained that they were discussing building up an internet server in the event that the connection to aprs.fi or the Internet in general – is lost. What is being discussed is a general APRS data server.

(James Huntley logged into the meeting.)

b. Education and Outreach (Written report):

#### Website Changes

Tony Kitchen:

I've already got most of the content copied over to the new hosting site. We also should set up a time in the next week or two for the committee to meet and discuss

I think the following should sum it up the progress so far:

BIARC has established an account with Namecheap.com.

Domain registration has been paid through 7/10/2021, and website hosting through 6/28/2021

We will continue to copy BIARC website content to the new hosting service.

After the E&O committee reviews, tests, and approves the final site design, the new site will go live. Our goal is to complete this work prior to the August monthly

Doug Wilson

We have filled the first class that starts on September 1, 2020. We are taking names for a second class that we will do in late October (no date yet) and have 8 signed up for that class so far.

Classes are being conducted via Zoom! I will continue to do Zoom classes until the COVID-19 situation improves

Testing will also be done virtually via the online testing run by Joe Speroni and Joe Tabra in Honolulu

After William acknowledged receiving the above report, Tony asked for some assistance with graphics for the new website including photos. He stated that the club logo does not fit well on the new page.

Some board members also saw the current BIARC logo as rather "old school."

c. Operating Activities (No report): People who participated in Field Day are encouraged to upload their logs, which are due near the end of July. The showing was good and it was fun for those who participated. Roy is looking to do something for Winter Field Day.

Tony noted that many of the prizes intended for Field Day were sold out. Tony has the CW coins and can get the pins, and Robert has a Field Day coffee mug.

Please contact Tony Kitchen via email if you are interested in participating. (tonykitchen808@gmail.com)

4

#### Proposed MOU with County Dept. of Water Supply

No progress to report.

William stated that he and Paul had lunch with a DWS contact and learned that although the proposed MOU was great, the Water Board prefers a looser agreement. This means we could craft a simpler agreement that would be to our advantage. William will pass along a copy of a recently-approved agree

f. Voice Repeaters (Written report published in July 2020 BIARC Newsletter as column by William Polhemus): Even more recent work involved "borrowing" an unused CAP antenna for transmit testing purposes. Popcorn as described in the report was considerably reduced. The repeater will remain there for now (about 12 feet off the ground.) He still hopes to take receive from the tower-top antenna in the future. A second cross-band repeater (or a remote receiver) is being considered.

The Yaesu repeater deviation was over 5 KHz on analog and that will have to be realigned before placing it back in service. The battery backup from Kulani will be

#### C. New Business:

3

None.

#### D. Old Business:

- a. Club T-Shirts: There has been no progress. This item will remain on the table for now and can be addressed when social distancing requirements have been modified
- b. MOU with the County of Hawai'i Department of Water Supply: No action taken.
- c. BIARC Lending Library: In committee.
- E. Other Business:
- F. Adjourn: There being no further business, William adjourned the meeting at 1248.

Respectfully Submitted,

Leslie D. Hittner

Leslie Hittner, Secretary

Enc: Written Committee Reports (Education & Outreach, Digital Systems, Program, PSCC)

Voice Repeater published as article by William Polhemus in July 2020 BIARC

### **Education and Outreach Committee** July 2020

#### **Website Changes**

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#### **Technician Classes**

From Doug Wilson:

We have filled the first class that starts on September 1, 2020. We are taking names for a second class that we will do in late October (no date yet) and have 8 signed up for that class so far.

Classes are being conducted via Zoom! I will continue to do Zoom classes until the COVID-19 situation improves.

Testing will also be done virtually via the online testing run by Joe Speroni and Joe Tabra in Honolulu.



# The President's Corner

Crunch Time

You've probably heard the change The BIARC repeater on Kulani Cone has been removed, and has been replaced

William Polhemus, NH6ET

The July BIARC Repeater Committee report, in-full with photos, was published in the July BIARC Newsletter, which can be downloaded from the BIARC website.

# Digital Committee Report

# James Huntley noted:

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Jim has been working on an update for the iGate/digipeater and is researching a possible SDR iGate and considering the pros/Cons of the two systems.

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# Program Committee Report July 2020

From James Huntley:

Ideas for upcoming months programs: If COVID cases keep trending up we may not have live meetings anytime soon.

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