

March 2022 Newsletter

Next up on Zoom
([get link on BIARC ListServe](#))

Saturday, March 12
Noon: BIARC Board meeting
2 pm: Membership gathering

Big Island Amateur Radio Club

Why do Amateur Radio operators learn and use ICS?

The Incident Command System (ICS) may not be well understood by all in the Amateur Radio community. The following describes some basics, and how ICS applies to disaster preparedness and the Amateur Radio Service.

For the ARES April 16th COMEX, we have a collection of [ICS forms](#) that tell everyone what they need to know in order to participate. Under ICS, this is called an **Incident Action Plan**. (IAP) It includes the ICS-201 Incident Briefing, ICS-202, 203, etc. For [this particular](#) COMEX, the Incident Command is formed at the state level. Refer to the [ICS Organizational Chart](#):

This COMEX, was organized statewide but focuses on local operations. We pass communications from local areas to the Auxiliary Communications Service (ACS) in Hawaii County. Other Counties direct traffic towards their simulated EOC. The following describes the structures where the activities happen, and the titles used as defined under ICS:

~ EOCs and Hawaii County ACS are at the top at the County level. In this COMEX each County is a branch in the ICS structure, under the operations section. Sta-



**Tony Kitchen,
WH6DVI,
BIARC treasurer**

tions representing the role of the EOC have the title of Branch Director and fall under the management of the Operation Section Chief, at the state level.

ARES DECs are generally in the role of Division Supervisor. They are under the Branch Director for their County. The [ICS-204](#) & [ICS-205](#) for your branch and division describe how operations work in your area.

ARES CECs and others handling hub and official relay stations have the title of "Unit Leader."

They are listed in box 5 of each [ICS 204](#).

Stations initiating messages

Continued on next page

Down to Earth!

Information about grounding your amateur radio station, from the ground up.



NH6ET presents second segment of tutorial on huge, vital area of study

BIARC members got "Down to Earth" during the February 5 Zoom session as past-President William Polhemus, NH6ET, presented the second segment of his tutorial on the hows and how-not-tos of grounding and bonding amateur radio stations. If there's sufficient interest, he said, he would be happy to offer a third session later on.

"Grounding and bonding is a huge area of study," William explained.

Want to know more? "Come to the Tech Net and ask questions," William encouraged. (The BIARC



weekly Tech Net is at 8 p.m. Wednesdays on the Kulani repeater, 146.760.)

"From the Ground Up" was the focus of Part I back in August. Both sessions were recorded and can be accessed via

Continued on next page

From previous page

have the title "RADO" which is short for Radio Operator. A RADO is an example of what is referred to as a "Single Resource" in ICS.

The overall idea is to help us become more familiar with how we organize to help our community. The structure created for each incident varies. It is not the same as the organization chart of any participating group.

There is no correlation between the ARES hierarchy and the ICS Org chart.

ICS helps different organizations work well together.

Exercises under ICS are at their best when more than a single group is the focus of an exercise. Ideally, the position of Incident commander as well as the operations, planning, and logistics section chief would be held by someone in an emergency management agency. These people are trained in ICS, can define useful goals and objectives, and contribute significantly to the planning of any exercise. It is important for Amateur Radio operators involved in disaster communications to exercise using ICS. We exercise in a way that is similar to how Government Agencies, Non-Governmental Organizations, (NGOs), and other community and faith-based organizations do. It is done this way, so we can work better together in the future.

In ICS, People hold leadership roles in an incident because they are trained in ICS, emergency operations, logistics, planning, etc. Position titles in ICS are **not** assigned because someone has a high position or title in their organization. Leadership positions would often be an Emergency Management Agency employee, a member of a trained incident management team, a fire chief, a battalion commander, or a police commander because they have the training and skills needed,

Another Example of ICS: Organizing via Functional Branches.

If we were participating in an exercise with other groups, it could be organized differently. Consider a drill where the American Red Cross, Salvation Army, and other NGOs that support [SESF#6](#) (Mass Care) held a joint exercise. The Hawaii Red Cross director might become the Branch Director for SESF#6 statewide. Divisions would be established based upon geography, and each division supervisor would report to the Branch Director. In any particular division, all the volunteers at each organization would work under their division supervisor, regardless of which organization the supervisor or volunteers are affiliated with normally.

This is an example of a clear chain of command. The ICS branches in this example are organized based on function, and divisions are organized based on geography. The Org Chart might include other statewide functional branches as needed, such as public safety (SESF#13) or any of the other [SESF](#). Each branch would be organized with divisions, as needed. ICS is a VERY flexible structure.

It is all about groups working together for common specific objectives defined by the planning section, carried out by the operations section, under direction and authorities given to the IC.

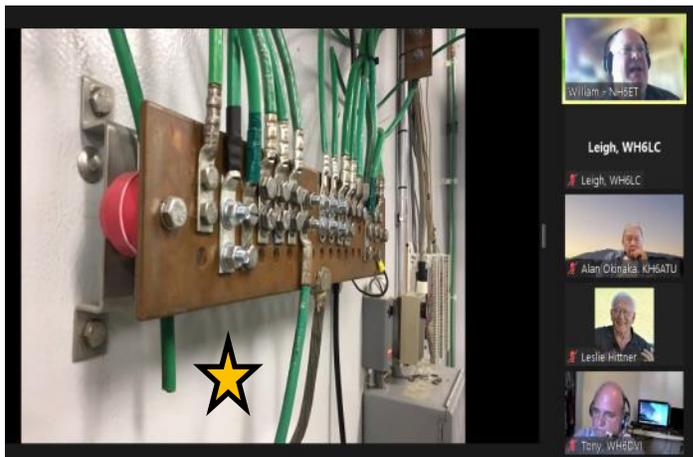
No matter how the ICS organizational chart is set up for an incident, Amateur Radio operators would be working for the IC. We would not necessarily be volunteering for any particular organization. We would typically start out under the Logistics Section, Service branch, in a Communication Unit. (ComU) These units are organized and led by someone who is qualified to be the Communications Leader. (ComL) Any ComU may be assigned to any level of the ICS organizational chart where they are needed. This includes Command, Operations, Planning, Logistics, Accounting, and subdivision under these sections.

Exercises planned under ICS are most effective when several organizations exercise together. It is good to start with discussions, then tabletop exercises, and finally we move on to functional and full-scale exercises. Incident Command would often be at the County or Community level, and branches may be organized by function capabilities under [SESF](#) designations, with divisions based on geography.

There are many ways to organize under ICS, depending upon the size, scope, complexity, and nature of the incident. We are volunteering to help our community. We work to achieve common goals and objectives. We have a clear chain of command and unity of purpose. The [free training link](#) will help us understand how it all fits together. Information under [this link](#) covers the various positions and titles used in ICS.

With ICS, we take off our organizational "hat" and become a part of a team. It is for the benefit of the whole community. I encourage all licensed Amateur Radio Operators to sign up for the ARES COMEX based on ICS which happens on April 16th from 0900-1200. Amateur Operators may sign up by clicking the link to the [Google form](#).

Tony Kitchen, WH6DVI



**GROUNDING:
From
previous
page**

**Professor
NH6ET gives a
thumbs-up
and gold stars
to each of
these three
examples of
proper work
(above and to
the right).**



**BIARC President Les
Hittner's previous K0BAD
QTH in Minnesota.**

the club website, [biarc.net](#).

Also, during the February general Zoom session, club officials encouraged all members to volunteer to help with one of the many club projects. Examples might include serving on a standing committee (see listing on Page 8).

Or how about helping one of the emergency communications groups who assist during times of crisis. As one example, volunteers are needed in the effort to keep health-care facilities connected via emcomms across the state when standard communications networks are down, said BIARC Treasurer Tony Kitchen, WH6DVI, chair of the Public Service Communications Committee.

In other news: BIARC 2022 dues are overdue. Please kokua.



Why should you ground your station?

1. Safety.
 - Grounding and bonding protects you, your family, your home, and your equipment.
2. Performance.
 - Grounding and bonding can reduce noise, reduce spurious emissions, prevent many types of equipment malfunction, and even increase receiver performance.
3. RF burns suck.

ARISS seeks proposals for student interaction with Space Station

Aloha, ARRL Pacific Section members:

Please pass this information to schools in your area that may have an interest in pursuing a school "Amateur Radio on the International Space Station" contact project.

The Amateur Radio on the International Space Station (ARISS) Program is seeking formal and informal education institutions and organizations, individually or working together, to host an Amateur Radio contact with a crew member on board the ISS.

ARISS anticipates that the contact would be held between January 1, 2023 and June 30, 2023. Crew scheduling and ISS orbits will determine the exact contact dates.

To maximize these radio contact opportunities, ARISS is looking for organizations that will draw large numbers of participants and integrate the contact into a well-developed education plan.

The deadline to submit a proposal is March 31. Proposal information and more details such as expectations, proposal guidelines and the proposal form can be found at <https://ariss-usa.org/hosting-an-ariss-contact-in-the-usa/>

Crew members aboard the International Space Station will participate in scheduled Amateur Radio contacts. These radio contacts are approximately 10 minutes in length and allow students to interact with the astronauts through a question-and-answer session.

An ARISS contact is a voice-only communication opportunity via Amateur Radio between astronauts and cosmonauts aboard the space station and classrooms and communities. ARISS contacts afford education audiences the opportunity to learn firsthand from astronauts what it is like to live and work in space and to learn about space research conducted on the ISS.

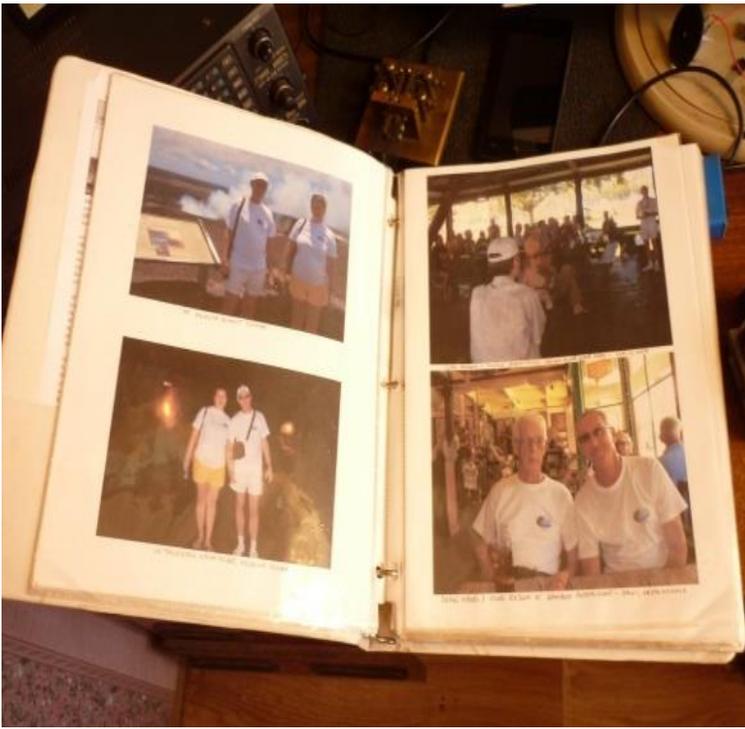
Students also will have an opportunity to learn about satellite communication, wireless technology, and radio science. Because of the nature of human spaceflight and the complexity of scheduling activities aboard the ISS, organizations must demonstrate flexibility to accommodate changes in dates and times of the radio contact.

Amateur Radio organizations around the world with the support of NASA and space agencies in Russia, Canada, Japan and Europe present educational organizations with this opportunity.

The ham radio organizations' volunteer efforts provide the equipment and operational support to enable communication between crew on the ISS and students around the world using Amateur Radio.

Please direct any questions to ariss.us.education@gmail.com

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



This photo album from (SK) Dean Manley's ham shack is now in the hands of Oleg Borodin, RX3G, and his wife, Olga, who were here from Russia more than a decade ago. They enjoyed making friends with BIARC members and other Big Island hams.

To (and from) Russia, with aloha

John Bush, KH6DLK, came across photo albums going through (SK) Dean Manley's ham shack. One was an album of pictures that were taken when Oleg Borodin, RX3G, and Olga, his wife, were here from Russia more than a decade ago.

John passed along the album to Barbara Darling, NH7FY, who sent the album and additional treats of some Big Island cookie packages on to the Russian couple. In response, Oleg sent a

heartfelt thank-you for the precious photos and cookies and also sent greetings to the BIARC membership.

"Me with my wife Olga had some tears while looking the photos," wrote Oleg, verifying Barbara's mailing address so they could send her a little thank-you gift in return.

"We send our greetings and the warmest ALOHA for all BIARC friends. We never to forget our visit to Hawaii in 2010," he wrote. And he remembered another of his BIARC buddies, (SK) Richard Darling, AH7G, Barbara's late husband and a BIARC stalwart.

Mark your calendars for April 16

Amateur Radio Emergency Communications Drill Kawailani 'Ino Hawaii (Heavenly Water Storm)

Hawaii Amateur Radio Emergency Service (ARES®) will conduct a training EXERCISE on April 16th, 2022 between 9 AM and Noon that will exercise and train using the Incident Command System Structure. This EXERCISE will simulate a 4-day period of catastrophic rain and wind covering the Hawaiian Islands from Kauai to the Big Island with loss of power, internet and cell towers in order to train ARES® members and non-members in radio operations and procedures.

ARES® is made up of Amateur Radio operators, who register their equipment and qualifications with the ARES® organization. (HawaiiARES.Net) These operators provide volunteer communications services in times of disaster or civil emergency.

The ARES® national organization is comprised of smaller regional organizations, each being within an Amateur Radio Relay League (ARRL) Section. (www.arrl.org/sections) This web page serves the Hawaii Section, covering the entire state of Hawaii, managed by the ARRL Pacific Section Manager (SM).

Hawaii ARES® is segmented into four counties. Each County is organized into districts, each having an assigned District Emergency Coordinator (DEC). Each district may be further divided into communities, having a Community Emergency Coordinator (CEC).

Amateur Radio is not a replacement for normal communications channels (such as phone and internet) used by Public Safety or governmental agencies; it acts to serve agencies in a subordinate capacity when those channels have been destroyed or compromised. It thus enables Public Safety agencies to focus on their primary role, maintaining critical services. It also serves private agencies such as American Red Cross and Salvation Army whose disaster relief efforts would be hampered by not being able to communicate effectively.

In recent history, Hurricane Maria was a deadly Category 5 hurricane that devastated the northeastern Caribbean in September 2017, particularly Dominica, Saint Croix, and Puerto Rico. Amateur Radio proved to be a vital resource for Fire, Police and local Government and private agencies in providing communications across the islands when phone lines, power lines, and cell towers were almost completely blown away.

There are over 778,000 amateur radio operators in the United States, Guam, Virgin Islands and Puerto Rico and over 3,800 in Hawaii.

**Stacy Holbrook,
KH6OWL**

Materials for participants to be distributed soon

The participant materials for the Hawaii ARES Statewide COMEX on April 16th from 0900-1200 will be distributed soon via the main@hawaiiares.groups.io group, and the <https://hawaiiares.net> website.

FCC Part 97 license holders may sign up for the COMEX via the following Google Form: https://docs.google.com/forms/d/e/1FAIpQLSfzVLdAOjuD8r6paeyKalj8hwag4AtSX2Vq-QjnUQSlaukW7Q/viewform?usp=sf_link

If you will be able to participate, please feel free to sign up for this COMEX. All licensed Amateur Radio operators in Hawaii are invited to participate. Local operations are coordinated through your local CEC/DEC and a planning team member on each island. All operations are organized under the [Incident Command System](#) (ICS) through the development of an Incident Action Plan. (IAP) The IAP is a collection of ICS forms such as the ICS-201 Incident Briefing, ICS-202, 203, 204, 205, etc. This exercise was developed using guidance from the Department of Homeland Security Exercise and Evaluation Program. ([HSEEP](#))

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**Tony Kitchen, WH6DVI
Hawaii ARES COMEX Planning Team
ARES, ASEC - Hawaii County**

BIARC Winter Field Day Part II: An update from the Lone Star State

In mid-February, Mike Furrey, WA5POK, emailed a report from the Lone Star State, updating new friends made at the BIARC Winter Field Day and introducing himself and partner Cheryl Pratt, KM4TYV, to the rest of the BIARC ohana.

Cheryl and I are finally back in Texas and we finished getting my tower up. Now we are waiting for the winds to die down to get the beams up. I am starting with a Force 12 C3 then later adding a Force 12 two element 40. When we got back, the Internet was down for a couple of days. Ugh.

Anyway, here are a few details about us. Cheryl, KM4TYV, and I were invited to the Big Island to help explore and map some recently found lava tube leads and that is what we did the first week there.

The second week, we played tourist and I was able to get on the air from the cabin. I have never operated outside the 48 and wanted to give it a try. I brought over a Yaesu FT857 and I operated CW and PSK and Cheryl did FT8. The first antenna I put up was a 20-meter EDZ and then converted it to an 80-meter wire vertical with one elevated radial with which I was able to make CW Qs with NA and around the Pacific rim. I then put up the 40-meter OCF antenna and made a few CW Qs but Cheryl was king, er queen, on FT8. Between us we made about a 100 Qs.

We are also both cavers, with almost a hundred years of experience between us. By the way, it was ham radio that got me started in caving. That is another story. Cheryl's dad was into ham radio and it is reported her first words were "CQ CQ." Cheryl didn't get her ticket until she started hanging out with me, but because of her work in electronics, it was easy for her to get it. When we are not playing radio, we enjoy hiking and caving and a bit of kayaking. It was at a caving convention that we met a number of years ago.

Most of my ham radio activities are DXing and light contesting and working with, and on, vintage rigs. I was posting in a FB antenna group and struck up a conversation with Tom, W7LTF, and he said he could put me in touch with hams on the Big Island, and he did with Roy Kunishige, KH6KU (BIARC Winter Field Day chair).

Thanks for the newsletter; we enjoyed it and hanging out with the club at the Winter Field Day. As for coming back to the Big Island, it is not IF, but WHEN, and most likely during Volcano Week next year. We both enjoy geology and we spent a lot of time looking at the different flows, cinder cones, vents and got up at 5 AM one morning to watch an eruption and lava fountain.

~ 73, Mike WA5POK

Mike Furrey, WA5POK, shared these photos with his new BIARC friends:

Below: Cheryl Pratt, KM4TYV, works on tower at her home QTH in Oak Ridge, Tennessee.

At top right: Shortly after returning to Texas from the Big Island, they hiked in Big Bend National Park over to the Mule Ears, visible about 2 miles behind Cheryl.



On March 1, Mike WA5POK sent these pictures of his Texas tower: "Cheryl is bolting the sections together while I get to pull the 70 lb sections up and then lower them in place for Cheryl to insert the bolts. Currently it is 32' to the top plate and 40' and the triband antenna is a Force 12 C3S. Hanging off the side is an 80/40 meter trap dipole. It will go higher and when the mast is fully

extended, I will add a two element 40 meter beam. I gave it its first workout this past weekend in the NAQPRTTY contest I made 671 Q so the system is working. I also worked KH6AQ and KH6ZM during the contest."



Mike WA5POK at WFD off Mana Road.

The WFD gang, from left: Mike Furrey, WA5POK; Joe Rosenbaum, WH6FZH; WFD Chairman Roy Kunishige, KH6KU; Jim Huntley, WH6FQI, and Gary Schwiter, WH6EPS. In foreground: Cheryl Pratt, KM4TYV, and Glenn Kadota, AH6EI. Photo by Paul Ducasse, WH7BR

Lewis and Clark Trail On The Air

Clark County Amateur Radio Club, out of Vancouver, WA will be hosting a new event to start June 2022. CCARC is an active club of over 400 members. It has also received the recognition of being an ARRL Special Services Club. The club has made a big impact on the amateur radio community in the Pacific Northwest.

Lewis and Clark Trail OTA is being organized by a committee of CCARC members. The event will be from June 4-19, 2022. Lewis and Clark traveled through 16 states, and we're working on getting a club from each state to activate. There will be certificates sent out for those that contact all 16, and another certificate for those that contact fewer. We see this as a chance to promote the Lewis and Clark Expedition and honor them for their achievement by bringing them in to the amateur radio world of 2022. Mark your calendars for this special event and see how many contacts you can make.

LCTOTA.org

Lewis and Clark Trail On The Air on Facebook

An ode to Lunch By Barbara

Every Friday on the radio net, Barbara Darling announces, "I need to know who is coming to lunch today at Ponds! I have three already and if we get more than ten, we will need to order another table!" Operators on the Friday Net respond, adding to an often growing list.

After joining BIARC and hearing about this lunch, it took me several months to finally sign up for my first lunch gathering. Ponds was one of my favorite eating place, I had to add some new activities living under the shroud of the pandemic, and I thought this would give me a great opportunity to have a face and personality attached to names and call signs.

Well, Ponds exceeded my expectation of good dining. Excellent selections and everything tasted ono. There is an interesting phenomena that occurs every time we gather for lunch. The other person's order always looks more ono. Not sure how this works, but it feels like mental foreplay for the next Friday gathering a week later. And, the head chef comes out when we are almost done to enjoy the smiles he created from eating the meals he prepared. How cool is that?

Adding this luncheon to the limited things I do trying to not be a COVID victim has worked well. Ponds has taken steps to ensure proper spacing between tables and still maintain a cheerful atmosphere that enhances the view of the pond outside with a friendly din of murmurs from other tables. I could feel my shoulders relaxing and my mind following other directions and not just the path of fear. Arriving at the restaurant is always special with nene geese and ducks waddling along the pond's shore and allowing me to be a couple of feet away from them. One time, I heard one of the nene say to his partner, "Okay Harriet, here's that guy who always stares at us. Get your feathers looking good."

Then attaching faces to names and call signs! Although I met and worked with several BIARC members since joining the club, talking story in a relaxed atmosphere adds special colors and dimensions to getting to know someone. Having lunch together encourages and even justifies talking about our families, our other avocations besides amateur radio, and our always interesting perspectives on world events. This is when perceptions and perspectives seem to merge and I think this is because everyone is there to simply have a delicious lunch and talk story.

The topics covered and verbally massaged vary widely, but it is wonderful to hear and see how every topic is peppered with laughter and smiles. These luncheons have provided an opportunity for some to celebrate a special memory. It is a true celebration when Barbara treated everyone to ice cream and this spontaneously gave everyone a moment to reflect on Richard's life and special smile. Richard's favorite food was ice cream. We created joyous birthday celebrations with ice cream, and when I returned from my Alaskan salmon fishing trip, I had to celebrate with ice cream to calm my excitement!

So, Lunch By Barbara every Friday at Ponds has no agenda, special speakers or presentations, but it goes a long way in creating friendship over ono food and talk story. Mahalo, Barbara.

Alan Okinaka, KH6ATU



KF7LUA participates in 2011 Rookie Roundup.

ARRL file photo

Calling all rookie hams: This roundup is for you

Calling all rookie hams: The ARRL invites you all to join in this year's Rookie Roundup events. Each runs for six hours (from 1800 to 2359 UTC) on the dates shown below.

-- Sunday, April 10, 2022, using SSB.

-- Sunday, August 21, 2022, using RTTY.

-- Sunday, December 18, 2022, using CW

For complete details and rules about Rookie Roundup, please log on to

<http://www.arrl.org/rookie-roundup>

Coordinators encourage "Old Timers" also to take note of this event. Consider opening your station up to a rookie (or two) and become an elmer. Remember, the more operators are on the air, the more fun the 'Roundup will be for everyone.

Be sure to read the rules before the event. It is also helpful to be familiar with the logging and submission processes ahead of time. You're in the right place; browse this page for information and tips on operating the Rookie Roundup. We hope to hear you on the air!

NEW RULES = MORE ROOKIES!

- You can be a Rookie if you were first licensed in 2021, 2020, 2019 or 2018 - send the year you were first licensed in the exchange.
- If you were licensed before 2018 you can also be a Rookie if you made your first Amateur Radio contact during 2021, 2020, 2019 or 2018 or if you haven't made any contest contacts on the contest mode (SSB, CW, or RTTY) before the Rookie Roundup contest, send the current year (2021) in your exchange - either of these reasons qualify you as a Rookie for just one year.
- Rookies will attempt to make as many contacts as possible during this 6-hour event. Rookies work every-one ... and non-Rookies work only Rookies.

This is a great way to try out contesting in an event designed for newcomers. To pre-register teams or submit your score after the event, check the contest instructions.

BIARC Executive Board Meeting

February 12, 2022

A Begin Meeting

Call to Order –

The meeting was called to order at 12:01 pm by Board President Les Hittner.

Quorum Call

Present: William Polhemus, Tony Kitchen, Leslie Hittner, James Sugg, James Huntley.

Secretary's Report and Minutes (1/8/2022)

William **motioned** and Tony **seconded** that the January BIARC Board Minutes be approved as published. Motion **passed**.

Budget and Treasurer's Report

William **motioned** and Jim Sugg **seconded** that the BIARC 2022 Budget be approved without changes. Motion **passed**.

Fund summary discussed and Tony will change the Humanitarian fund summary to not list out donors names It will be handled in the same way as the repeater fund. based on the motion made in the January meeting.

B Member Input and more

No club members input given.

C Committee Reports

Digital Systems –

No written report

Education and Outreach -

No written Report.

Operating Activities -

No written Report.

Program –

No written Report.

Public Service Communications –

PSC will report quarterly. However, informational updates may be given.

No Written report submitted.

Voice Repeaters –

No written Report.

D Old Business

Chair's Goals

Chair will no longer be seconding or making motions.

Meetings will start with routine items like Secretaries Minutes and Treasury reports.

They usually are published ahead of time allowing for minor input/corrections to be made prior to the board meeting.

Disputes of items will be decided during the meeting.

Committee reports will be accepted after all reports are given by a single motion.

Written reports will be provided in advance or at the meeting.

Written reports are expected if there is activity in a committee. Without written reports, it opens the door to interpretation by board members and the secretary.

Chair will make an effort to stick to time estimates on the agenda.

Making motions early in discussions to:

Focuses the ensuing discussion, so there is less laundering.

Informs the entire board that there is a specific goal of the discussion. Once the goal has been met a vote or a delaying action can take place.

Member input is being moved to the start of the meeting so that members do not have to wait through the entire meeting to give their input. This allows them to leave if they don't want to stay for the entire meeting. Board members should listen and take club member input into consideration.

Final Approval of 2022 Budget

Tony mentioned these numbers are based on projections of dues to be paid. The budget may need to be adjusted later if there is a shortfall of receipts.

Move to accept by William and **seconded** by Jim Sugg, motion **passed**.

In-Person Monthly Club Meeting Update

2022 officers



President Hittner



Vice President
Kunishige



Secretary
Huntley



Treasurer
Kitchen

BIARC Board minutes, from previous page

Keaau Community Center is still not available. HCC Electronics classroom is still a possibility. Puna Covenant Church may be allowing meetings outside next month.

William **moved** to have the Programs Committee explore the use of the church for club meetings. It was **seconded** by Tony. Motion **passes**.

William **moved** to request the Programs Committee to explore other options, including use of facilities within the University of Hawaii system. Motion **seconded** by Jim Huntley. Motion **passes**.

The intent is to retain online presence should we resume in-person club meetings.

Hospital EmComm

There is a requirement that anyone that wants to volunteer needs to get credentialed by the people at Hilo hospital. The pandemic has made getting credentials difficult.

There was a misconception that this was a BIARC driven program. It is a state program run by Hawaii Healthcare Emergency Management (HHEM).

<https://www.hawaiihealthcareemergencymanagement.net/about-1>

Information about HHEM and their function should be gathered for the BIARC newsletter.

Repeater parts Reimbursement

Jim Sugg **moved** and Tony Kitchen **seconded** a motion for reimbursement of \$400.55 for the pipe to pipe tower leg clamp. Motion **passed**

Kulani Repeater Coverage update

A new antenna is being designed by the State of Hawaii and they asked for our repeater frequencies, with the plan of designing in our repeater's input frequency. This will put our receive at the top of the tower and transmit at a mid-level position.

Motion Regarding Members

Tony Kitchen **moved** to remove all members, who have not paid by the end of the month, from the membership and committee lists. **Seconded** by Jim Sugg. Motion **failed**.

William **moved** that the treasurer takes a snapshot of the paid members at the end of February for use in determining a club Quorum and publishing the list in the newsletter. **Seconded** by Jim Huntley. Motion **passed**.

William **moved** that the feasibility of having the paid member roster exported monthly for the website and published annually in the newsletter be referred to the Education and Outreach Committee.

Seconded by Tony Kitchen. Motion **passed**.

There being no further business, Les adjourned the meeting at 12:57 pm HST.

Respectfully Submitted,

James R. Huntley, Secretary

1) Public Service Communications Committee

Tony Kitchen, Chair, WH6DVI. to-nykitchen808@gmail.com

Leslie Hittner, K0BAD

Paul Ducasse, WH7BR

David Miller, KH6CZ

Mark Watanabe, WH6FSA

2) Operating Activities Committee

Roy Kunishige, Chair, WH6FYK.

roy.kunishige@gmail.com

John Bush, KH6DLK

Joseph Rosenbaum, WH6FZH

Paul Ducasse, WH7BR

3) Programs Committee

James Huntley, Chair, WH6FQI. wh6fqj@gmail.com

Bob Schneider, AH6J

William Polhemus, NH6ET

4) Digital Systems Committee

James Huntley, Chair, WH6FQI

Mel Uchida, KH6EKD

Paul Ducasse, WH7BR

Gary Schwiter, WH6EPS

Jim Sugg, AH6AE

5) Voice Repeaters Committee

William Polhemus, Chair, NH6ET

Gary Schwiter, WH6EPS

Paul Ducasse, WH7BR

Alan Okinaka, KH6ATU

6) Education and Outreach Committee

Leslie Hittner, chair, k0bad@arrl.net

Doug Wilson, KH7DQ

Tony Kitchen, Leigh Critchlow

Other Leadership Roles

Station Custodian

Paul Ducasse, WH7BR

BIARC Representative to Hawaii Island / Hawaii State VOAD

David Miller, KH6CZ. davroymill@gmail.com

Website Manager

Tony Kitchen, WH6DVI. TonyKitchen808@gmail.com

(In coordination with the Education and Outreach Committee.)

If you are interested in serving on BIARC committees or in other leadership roles, please contact Les Hittner, via EMail: K0BAD@ARRL.Net



APRS Developer Bob Bruninga, WB4APR, SK

The father of the Automatic Packet Reporting System ([APRS](#)), Bob Bruninga, WB4APR, of Glen Burnie, Maryland, died on February 7. An ARRL Life Member, Bruninga was 73. According to his

daughter, Bruninga succumbed to cancer and the effects of COVID-19. Bruninga had announced his cancer diagnosis in 2020. Over the years, Bruninga readily shared his broad knowledge and experience in APRS and other topics in the amateur radio and electronics fields.

While best known for APRS, Bruninga, a retired US Naval Academy senior research engineer, had an abiding interest in alternative power sources, such as solar power. In 2018, he authored *Energy Choices for the Radio Ama-*

teur, published by ARRL, which explores developing changes in the area of power and energy and examines the choices radio amateurs and everyone else can make regarding home solar power, heat pumps, and hybrid and electric vehicles. Bruninga drove an all-electric car and had experimented with a variety of electric-powered vehicles over the years.

What became APRS had its origins in 1982, when Bruninga wrote his first data map program that plotted the positions of US Navy ships for the Apple II platform. A couple of years later, he developed what he called the Connectionless Emergency Traffic System (CETS) on the VIC-20 and C-64 platforms for digital packet communications to support an endurance race. The program was ported to the IBM PC platform in 1988 and was renamed APRS in 1992. The recognized North American APRS frequency is 144.39 MHz and APRS is linked globally via the internet. Bruninga founded the Appalachian Trail Golden Packet event, which fields APRS nodes from Stone Mountain in Georgia to Mount Katahdin in Maine each July.

ARRL Contributing Editor Ward Silver, N0AX, remembered Bruninga this way: "Bob kept pushing APRS beyond its origins as a position reporting system. He developed and helped implement numerous other uses of APRS in support of what has become the 'Ham Radio of Things,' with great potential for future amateur radio applications. Bob's far-reaching vision and imagination were as good as it gets."

ARRL Announces New World Wide Digital Contest

The [ARRL World Wide Digital Contest](#) will debut at 1800 UTC on June 4, ending at 2359 on June 5, 2022. All non-RTTY modes are permitted. Going forward, RTTY will be the sole mode for the ARRL RTTY Roundup, which will continue to take place in January.

In broad strokes, this will be an HF to 6-meter event, on 160, 80, 40, 20, 15, 10, and 6 meters, with single-operator and multi-single entry categories. These are Single Operator, One Radio (SO1R), Single Operator, Two Radio (SO2R), and Multi-Single (MS). Overlays in the single-operator categories will include "all enclosed antennas" and "maximum of 8 operating hours." Single-operator entries may operate for 24 hours (with off times taken in one or two breaks that are at least 60 minutes long), while MS entries may operate for the full 30 hours.

Operating assistance is permitted for all operating categories.

Power categories will be:

QRP (5 W transmitter output or less)

Low Power (maximum 100 W PEP transmitter output)

The exchange for the World Wide Digital Contest will be a station's four-character grid square designation. Stations may work each other once per band, regardless of digital mode. Participants will earn 1 point for each contact, plus 1 point for each 500 kilometers (310 miles) between stations. So, a contact between stations 1,000 kilometers apart would be worth 3 points. The total score is total contact points.

ARRL makes available a grid-center [distance calculation tool](#). Options include kilometers (always rounded up), distance between pairs, and points.

For instructions on how to [submit logs](#), visit the ARRL Contest page. Logs will be due 7 days after the event has concluded.

In succeeding years, the World Wide Digital Contest will take place on the first full weekend of June.

[Full details](#) on the new operating event are on the ARRL website.