



February 2023

THE BIG ISLAND HAMGRAM

The newsletter of the Big Island Amateur Radio Club

THE PRESIDENT'S CORNER



*Alan
Okinaka,
KH6ATU*

Aloha e, **BIARC members!**

It is my great honor to serve as the president of the Big Island Amateur Radio Club (BIARC) for the year 2023.

I hope everyone moved into the New Year with great enthusiasm and excitement with family and friends.

Resolutions! Yeah, most of us make a resolution on or near New Year's day, and I decided to repeat what I started in the years 2021 and 2022. "Meet a stranger every day!" It is not to make friends or develop a new relationship, but to recognize someone's presence. It is fun to get an unexpected smile, a nod, and a HI, and I believe it might be the common denominator for a more peaceful world.

I was introduced to ham radio at age 15 by my uncle (KH6ATU), but my youthful filters did not catch being a ham as something interesting. Later in life, working for GTE Hawaiian Tel on the Big Island, I was super impressed



**Club will meet
Feb. 19
See details on
Page 3**

*Photos by Joseph
Rosenbaum, WH6FZH*

Members discuss club's purpose, learn about mag loop antennas

At the Sunday, January 15, club gathering at Kamana Center in Hilo, incoming BIARC President Alan Okinaka, KH6ATU, asked those in attendance to offer their thoughts on the purpose(s) of the Big Island Amateur Radio Club.

Answers ranged from public service communications, to em-comms, to elmering new operators, to expanding the pool of proficient hams.

There was also discussion on getting involved with other organizations for public service communications, such as races. There was talk of getting into schools with STEM and robotics programs, etc., to engage young



by the ham operators in the company who used their radios to align the microwave antennae between Kauai and O'ahu after the devastation of hurricane Iniki. I had one word, "Wow!"

BIARC newsletter member, Leigh Critchlow (WH6LC), occasionally peppered me with suggestions, "You should become a ham radio operator!" I respectfully ignored her, but then one cold morning at the Volcano Run, I met Paul Ducasse (WH7BR) providing radio communications for the run for runner emergencies, run status, and supplies.

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The President's Corner

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That's when the PTT button clicked, and I decided to absorb the teaching and guidance of Doug Wilson (KH7DQ) and James Tatar (WH6EMN) to earn my Technician License. I later earned my General with the help of Joe Speroni (AH0A) on O'ahu, which was all by ZOOM. I saw how amateur radio can be fun and also be a vital asset for a community in emergencies. And, I even adopted my uncle's call sign, KH6ATU!

Joining BIARC was very rewarding because I met many people who shared their knowledge, skills, and excitement generously. Of course, the more you learn, the more you know how little you know, and it was for me. Our morning nets gave me opportunities to become comfortable with my radio equipment with the bonus of better knowing ham operators in and outside the club. It is interesting for me to actually "know" someone who I have never met face-to-face.

At the first board and membership meeting I presided over, I asked everyone to tell me what they felt was the purpose of BIARC. Everyone spoke up and three purposeful areas emerged quickly.

First the obvious: BIARC allowed amateur radio operators to gather and share their knowledge and skills in amateur radio.

The second is how important it is that BIARC has a presence in our communities by being a part

of community events and projects.

And, the third is to constantly assist our members to maintain their qualifications as ham radio operators by adhering to all the regulatory requirements.

Hearing this was very exciting for me. I have served on many boards and these are the ingredients necessary to have a fun bunch of people. We want to help each other, we want to help and be part of the community we live in, and we want to maintain our skills and knowledge to ensure the organization is healthy.

With these purposes in mind, we need to develop and carry out projects and programs. BIARC has six standing committees for this to happen, and I encourage all BIARC members to volunteer their skills, knowledge, and excitement to these committees. I chose the repeater committee headed by William Polhemus (NH7ET) because I knew very little about repeaters. So, there is that opportunity to learn because there will be others on the committee who are very knowledgeable.

As the year progresses, BIARC projects and programs will be announced on the website (www.biarc.net) and through emails. The board will try hard to get the word out on these activities as soon as the dates are confirmed, so members can mark their calendars to participate. When a Eureka moment strikes with a great idea for BIARC, send it to me via email (alan.okinaka@gmail.com).

So, please join me and the board to make BIARC an exciting and fun place to be.

Mahalo,
Alan, KH6ATU

Members gather at Kamana Center in January — from P1

minds on radio technologies.

Members were treated to a mag loop presentation by Jim Huntley, WH6FQI. Roy Kunishige, KH6KU, had another mag loop (qrp) on display as well. Jim explained that the antenna is good for selectivity, rejecting noise and has good directionality. William Polhemus, NH6ET, explained how mag loops worked and noted that they can become omni-directional.

Outgoing President Les Hittner, K0BAD, convened the monthly BIARC Executive Board meeting on Saturday, January 14, at the usual midday time, but at a new venue: Sky Garden Restaurant at Imiloa.

Among the agenda items was election of 2023 board officers:

**President Alan Okinaka,
KH6ATU**

**Vice President Jim Huntley,
WH6FQI**

**Secretary Joseph Rosenbaum,
WH6FZH**

**Treasurer Tony Kitchen,
WH6DVI**

At-large Directors are Roy Kunishige, KH6KU, and a yet-to-be elected second at-large director to fill the vacancy created by the death of Jim Sugg, AH6AE, SK. William Polhemus, NH6ET, stays on as club custodian.

The minutes of the January BIARC Executive Board meeting are on Page 4 of this newsletter.

BIARC work party helps restore public safety comms in PTA vicinity knocked out by Mauna Loa eruption

On January 25th, 2023 the BIARC Executive Board received a request from the Hawaii Fire Department's AUXCOM team to provide a short-term solution to restore public safety communications in the vicinity of the Pohakuloa Training Area, Fire Station 50, and the other PTA public safety agencies, had been without their regular radio communications since the Mauna Loa eruption cut off the power and access to the area of the Mauna Loa Observatory.

An emergency email vote was initiated by William Polhemus (AUXCOM Team Leader - Hawaii Fire Department and station trustee for KH6EJ Big Island Amateur Radio Club) to accept this request for assistance from the Hawaii Fire

Department, and supply any necessary equipment we may have, allow the temporary use of our antenna at the Mauna Loa tower site, and also any necessary technical expertise to implement this solution with the Hawaii Fire Department AUXCOM team. The motion passed unanimously.

On January 28 we tried to pre-build the repeater set-ups at the Big Island Hamfest in Waimea, but we didn't have enough time to go through everything and experienced some equipment failures.

The next day the work party at the Mauna Loa site experienced other problems such as getting unusual readings, higher than expected signals and grassy bottom signals on filters and other

components. The culprit was a faulty connector we were using for calibrations of VNAs (Vector Network Analyzers.) We managed to get one repeater up and running and the next day William brought a different repeater and set it up in the compound, so they're currently operating off of two repeaters.

The work party was a great experience and we learned some advanced uses of our VNAs and how to troubleshoot real world problems. A good time was had by everybody in the work party and the Fire Department and the other public safety agencies are happy and thankful for our assistance.

Joe, WH6FZH

New Tech License class runs Feb. 22 - March 29 on Zoom

The next Amateur Radio Technician License Preparation Class will be via Zoom and begin on February 22, 2023 and end on March 29, 2023.

The purpose of this class is to prepare you to pass the test for the entry-level Technician Class Amateur Radio License. A Technician License is a good start to a wonderful life-long hobby and will equip you to communicate during a disaster when other means of communications have failed.

The classes are conducted twice a week for an hour and you will be provided with the Technician License question pool and numerous other reference materials throughout this course to assist you in preparing for the exam.

The course includes the examination and processing of your license application. There is no charge to take this course. However, there is a \$15 administrative fee to take the exam, and the FCC assesses a license application fee of \$35.

Please contact Doug Wilson (KH7DQ) at douscelle@aol.com if you are interested in taking this class.

February meeting moved to Sunday, February 19 at Kamana Center

Due to a scheduling conflict with Super Bowl Sunday, the February BIARC Executive Board meeting and membership gathering will be held at noon and 2 p.m., respectively, on Sunday, February 19, at Kamana Senior Center in Hilo.

BIARC President Alan Okinaka, KH6ATU, invites all members to attend the board meeting, as well as the membership gathering which follows.

Zoom access will be provided courtesy of Les Hittner, K0BAD, at this link:

<https://us02web.zoom.us/j/5181360132?pwd=bTVFTG5HZXowYVJ6OHpFcEV1dHJRUT09>

Kamana Center is located at 127 Kamana St. in Hilo.

HAMGRAM CLASSIFIEDS

Bill Carnett, AH6FC, in Waimea has an extra, brand-new antenna he is offering at a big discount.

"It's a great antenna. I just couldn't use it at my QTH due to HOA issues," he noted.

It's a SteppIR DB-11 3 element yagi (20-6 meters), wireless control unit+ 100 feet control cable.

Still in the box. Never used. Never unpacked.

New price is approximately \$5,200+ shipping.

Asking \$3,000 + shipping (firm) - will deliver on Big Island of Hawaii.

Interested?
Contact him at ah6fc@startmail.com.

BIARC EXECUTIVE BOARD MEETING

Begin Meeting

- The meeting was called to order at 12:03 pm on January 14, 2023 by Board President Leslie Hittner. Venue was the Sky Garden Restaurant at 'Imiloa Astronomy Center.

QUORUM

- Board members: Leslie Hittner, James Huntley, Roy Kunishige, Joseph Rosenbaum
- Non-Board Club Members: Bob Schneider and Alan Okinaka

Secretary's Report and Minutes

- Joe moved and Jim seconded that the November BIARC Board Minutes be approved as published. Motion passed

Treasurer's Report

- Jim moved and Roy seconded that the treasurer's report be approved as submitted, subject to audit. Motion passed.
- Les moved and Jim seconded to approve Alan Okinaka as a board member. Motion passed.

Slate of Officers

- Roy moved and Les seconded that we install the slate of officers as follows: Alan Okinaka (President), James Huntley (Vice President), Tony Kitchen (Treasurer), Joseph Rosenbaum (Secretary), Roy Kunishige to continue as (At-large Director) and William Polhemus to stay on as Custodian. Motion passed.

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Committee Reports

Digital systems- No report.

Education and Outreach-

Les suggested that the Operating Activities and Education and Outreach committees work together to expand public service communications activity.

Operating activities-No report.

Programs- No report.

Repeater Committee- No report

Old Business- None

New Business

Roy moved and Jim seconded that we ask Tony Kitchen for a new membership list with contact information for board members, with a caveat that a way to protect the members' sensitive information be implemented and adhered to. Motion **passed**.

Committee Membership

Note all committee chairpersons will be by interim decision

Public Service Communications Committee- **Tony Kitchen, Leslie Hittner, David Miller, Mark Watanabe**

Operating Activities Committee- **John Bush, Joseph Rosenbaum**

Programs Committee- **James Huntley (Chair), Bob Schneider, William Polhemus**

Digital Systems Committee- **James Huntley, Mel Uchida, Gary Schwiter**

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Voice Repeaters Committee- William Polhemus, Leslie Hittner, Alan Okinaka, Paul Ducasse
Education and Outreach Committee- Leslie Hittner, Tony Kitchen, Leigh Critchlow

Biarc Executive Board



Board Member <u>And</u> Office	Term	Expiration Date
Alan Okinaka	2 Years	January 2025 * This appointment must be re-affirmed by election or another person elected in November 2023 for the remainder of the term
James Huntley	2 Years	January 2024
Tony Kitchen	2 Years	January 2024
William Polhemus- Station Custodian	Ex Officio	Upon termination of Custodian role
Joseph Rosenbaum	2 Years	January 2025
Roy Kunishige	2 Years	January 2024
VACANT	2 Years	January 2025

- There being no further business, Alan adjourned the meeting at 1:14 pm.

Respectfully submitted,
Joseph Rosenbaum, WH6FZH
Secretary

Here's an intro to ChatGPT, an AI that can answer questions on all sorts of stuff, including ham radio

Aloha, BIARC members:

I don't know if you have ever used ChatGPT. It is an AI that can answer questions. It's still under development and open for use. Below are some questions I asked and the response. I thought our newsletter readers might like to see how ChatGPT can be an Elmer, or at least good for entertainment in ham radio.

73, Gary, WH6EPS

Question 1: Can you write an article for a newsletter on how GPT can help amateur radio?

Answer: Sure! Here's an article on how ChatGPT can help amateur radio enthusiasts:

Amateur radio, also known as ham radio, has been a popular hobby for many years. It involves using radios to communicate with other amateur radio operators from all around the world. However, the process of setting up and operating a ham radio station can be quite complex and time-consuming. This is where ChatGPT can help.

ChatGPT, a large language model developed by OpenAI, can assist amateur radio enthusiasts in several ways.

Firstly, it can answer questions and provide information on various aspects of ham radio, such as equipment, operating procedures, and regulations. This can help new hams get started with the hobby more easily and quickly.

In addition, ChatGPT can also help hams with tasks such as setting up their equipment and making contacts. For example, it can provide step-by-step instructions on how to set up a radio, antenna, and power supply.

It can also help hams find other amateur radio operators to talk to by providing information on frequencies, modes, and networks.

Furthermore, ChatGPT can also help with troubleshooting. If a ham encounters a problem with their equipment or communication, they can ask

ChatGPT for advice and guidance. This can save time and effort compared to searching for information online or contacting a manufacturer.

Finally, ChatGPT can also provide inspiration and ideas for new and experienced hams alike. It can suggest new operating modes, frequencies, and locations to try. It can also provide information on ham radio events, contests, and clubs, which can help hams connect with others who share their passion for the hobby.

In conclusion, ChatGPT can be a valuable tool for amateur radio enthusiasts. It can help with various aspects of the hobby, from getting started to troubleshooting, and provide inspiration for new and exciting experiences. If you're an amateur radio operator, consider using ChatGPT to enhance your ham radio experience.



Question 2: Can you tell me about AMSAT?

Answer: AMSAT (Radio Amateur Satellite Corporation) is a non-profit organization dedicated to the advancement of Amateur Radio through the use of non-commercial Amateur Radio satellites. It was founded in the United States in the 1970s and has since expanded to include members from all over the world.

AMSAT's main goal is to foster the development and launch of satellites for use by the amateur radio community. The organization designs, builds, and launches these satellites, which are then made available for use by amateur radio operators around the world.

AMSAT's satellites offer a range of capabilities, including voice, data, and image transmission. They provide opportunities for



amateur radio operators to experiment with new technologies, to participate in international communication and scientific experiments, and to engage in educational activities related to satellite communications.

AMSAT also provides support and resources for amateur radio operators interested in using its satellites. This includes technical information, operating instructions, and software tools to help users get the most out of their satellite communications experiences.

Overall, AMSAT plays a key role in promoting the use of amateur radio satellites and encouraging the growth of the amateur radio community. If you're interested in learning more about AMSAT and its activities, visit its website at www.amsat.org.



Question 3: Can you tell me about BIARC in Hawaii?

Answer: BIARC (Big Island Amateur Radio Club) is an amateur radio organization based in Hawaii, United States. It was founded to promote the hobby of amateur radio and provide resources and support for amateur radio operators on the Big Island of Hawaii.

The club offers a range of activities and services to its members, including regular meetings, training and educational programs, operating events, and technical support. BIARC also maintains a number of amateur radio repeaters on the Big Island, which are used by its members and other amateur radio operators to extend the range of their communications.

In addition to serving its mem-

The Application of ChatGPT

ChatGPT can be used for a wide range of natural language processing tasks. Some include:

Text generation:

ChatGPT can be used to generate human-like text responses to prompts, which makes it useful for creating chatbots for customer service, generating responses to questions in online forums, or even creating personalized content for social media posts.

Language translation:

ChatGPT can also be used for language translation tasks. By providing the model with a text prompt in one language and specifying the target language, the model can generate accurate and fluent translations of the text.

Text summarization:

ChatGPT can be used to generate summaries of long documents or articles. This can be useful for quickly getting an overview of a text without having to read the entire document.

Sentiment analysis:

ChatGPT can be used to analyze the sentiment of a given text. This can be useful for understanding the overall tone and emotion of a piece of writing, or for detecting the sentiment of customer feedback in order to improve customer satisfaction.

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Chat GPT

From previous page

bers, BIARC also plays an active role in supporting emergency communication and public service events on the Big Island. The club is a member of the Hawaii Emergency Management Agency's (HI-EMA) amateur radio program, and its members are trained and equipped to support communication during emergencies and disasters.

BIARC is open to all individuals interested in amateur radio, regardless of experience level or location. The club offers a supportive and inclusive community for its members and provides opportunities for individuals to learn more about the hobby and to connect with other amateur radio operators in Hawaii and around the world.

If you're interested in learning more about BIARC and its activities, visit its website or attend one of its meetings.

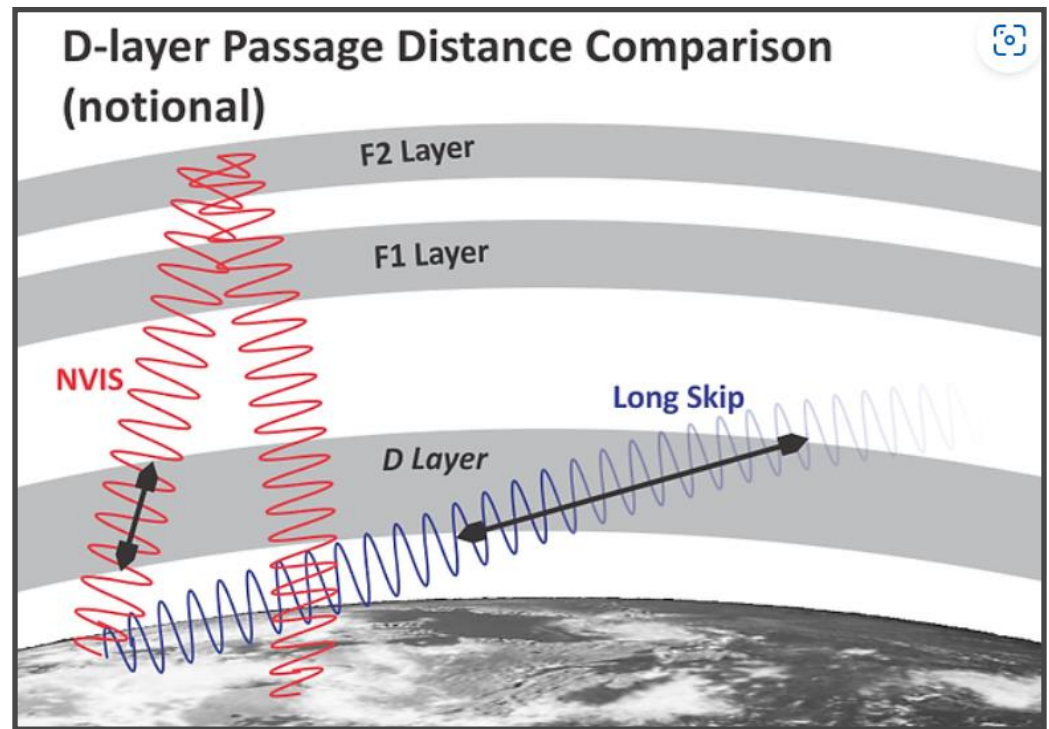
Question 4: Can you tell me about the history of BIARC in Hawaii?

Answer: I'm sorry, I do not have specific information on the history of the Big Island Amateur Radio Club (BIARC) in Hawaii.

However, amateur radio clubs like BIARC have been a part of the amateur radio community for many decades and have played an important role in promoting the hobby and supporting amateur radio operators.

Amateur radio has a rich and interesting history, dating back to the early 20th century. Early pioneers of the hobby developed the first wireless communication systems and established the first amateur radio stations. Over time, the hobby has evolved and expanded, and amateur radio clubs have played a key role in supporting the growth and development of the amateur radio community.

Today, amateur radio clubs like BIARC continue to play an important role in supporting and promoting the hobby. They offer resources and support for ama-



NVIS propagation minimizes transit through the D-layer with steep angles.

— Ham Radio School graphics

teur radio operators, provide opportunities for education and training, and serve as a focal point for the amateur radio community.

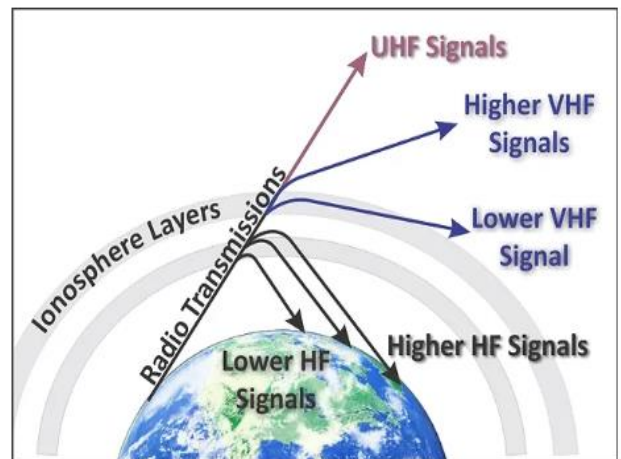
If you're interested in learning more about the history of amateur radio and its role in the development of wireless communication, there are many resources available online and in libraries.

Question 5: Can you tell me about radio NVIS on HF bands?

Answer: NVIS (Near Vertical Incidence Skywave) is a type of radio communication that uses high frequency (HF) bands to achieve short- to medium-range communications, usually within a few hundred miles. This type of communication is achieved by using an antenna that radiates signals nearly straight up into the sky, where they are reflected back to the earth by the ionosphere.

NVIS is often used in situations where communication is needed over a large area, but traditional line-of-sight communication is not possible. This is because the NVIS signal can penetrate vegetation and buildings and is less affected by terrain obstructions.

NVIS is commonly used by military, government, and emergency organizations, as well as by ama-



The bending effect of the ionosphere is greater for lower frequencies.

teur radio operators. To use NVIS, a specific type of antenna is required, such as a dipole or loop antenna, that is mounted at a low height above the ground. The low height of the antenna allows the radio signals to be transmitted at a low angle, which maximizes the signal's reflection from the ionosphere.

NVIS is an important tool for short- to medium-range communication on the HF bands. It provides reliable and flexible communication capabilities in a variety of environments and conditions, and is an essential part of the amateur radio operator's toolkit for emergency communication and other communication needs.