

April 2022 Newsletter

Big Island Amateur Radio Club

Next up on Zoom
(get link on BIARC ListServe)

Saturday, April 9
Noon: BIARC Board meeting
2 p.m.: Membership gathering

*Have enough coax
for an easy run
from rig to antenna*



"Setting up your Home Station" was the focus of a YouTube video by Dave Casler of "Ask OG."

Club talks station setup, emcomms exercise, Field Day at March Zoom meet

The program for the March 12 BIARC club meeting on Zoom was a YouTube video on "Setting up your Home Station" by Dave Casler, KE0OG, of "Ask OG." (View the 19-minute video at <https://dcasler.com/2015/06/30/ask-dave-episode-3>.) In this episode of Casler's series, he focuses on the proper way hook up your home ham station.

He focuses on the "absolute bare minimum station reference design," with a lot of good points, guidance and answers to basic questions.

President Les Hittner, K0BAD, conducted the meeting. As he has before, he encouraged members to get involved with one of the BIARC working committees. There are many ways to serve, he explained, with lots of long-term and short-term options.

Treasurer Tony Kitchen, WH6DVI, updated us on the upcoming April 16 COMEX emcomms exercise. Scenario is a devastating storm that moves down the island chain. It will run from 9 a.m. to noon, with Big Island hams handling the bulk of our message



Field Day Chairman Roy Kunishige, KH6KU, drew unanimous support for his No. 1 pick for the BIARC Field Day site. The club is seeking a permit to use a spot near the large pavilion in Wailoa State Park.

traffic from 10 a.m. on. Tony encourages members to sign up to help with the exercise. (Details and sign-up link are on our website at biarc.net, and on Page 8 of this newsletter.)

Tony is a member of the Hawaii State VOAD Communications Working Group and a few of its subgroups. He and David Miller, KH6CZ, BIARC's rep on the Hawaii Island subsidiary group, gave an update on VOAD, which stands for Voluntary Organizations Active in Disasters. Tony also chairs VOAD's Communications Working Group for Hawaii County.

Les thanked Tony for all of his major efforts in building good working

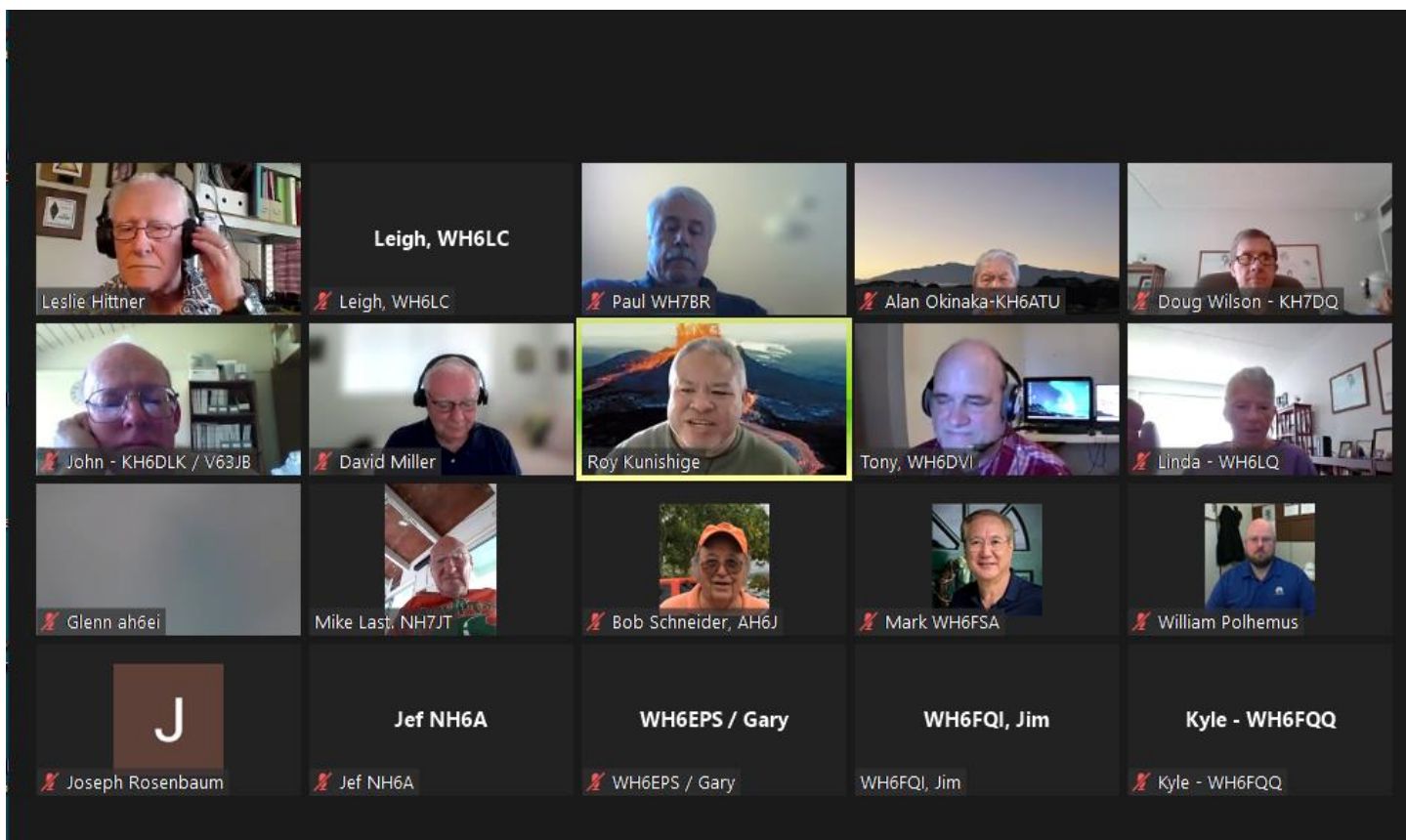
relationships between the local amateur radio community and government and civilian entities.

The next BIARC monthly activity will begin at 1400 HST This Saturday (April 9). The activity will be preceded by an Executive Board Meeting beginning at noon HST.

BIARC Board meetings now will begin (after the secretary's and treasurer's reports) with an opportunity for club members to speak to the board.

"I have moved these 'member input sessions' to the beginning of the meeting so that members do not have to wait around for the end of the meeting if they do not wish to,"

Continued on next page



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MARCH ZOOM MEETING: From previous page

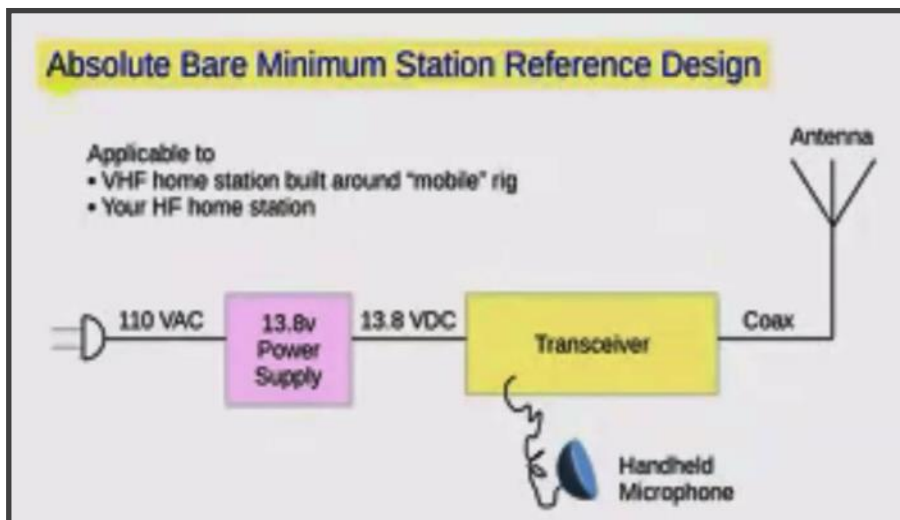
explains Les. "If you would like to address the board, please have your comments organized. This is not a conversation. Board members will take notes and acknowledge your comments, but normally no action will be taken until a future board meeting. Fifteen minutes are reserved for member input, so please keep your comments brief and to the point."

The Zoom link is the same each month. To join the meetings, connect to <https://us02web.zoom.us/j/5181360132?pwd=bTVFTG5HZXowYVJ6OHpFcEV1dHJRUT09>

BIARC Field Day Chair Roy Kunishige, KH6KU, talked about this year's annual Field Day towards the end of June.

"We need to get the ball rolling," said Roy, who also is BIARC vice president.

He showed aerial shots of several possible sites, primarily in the Wailoa State Park area and one on Reeds Bay. By unanimous vote, members opted for Roy's favorite site (see photo on Page 1) which is near the big pavilion, with water access, restroom facilities and good line-of-sight to Kamehameha Avenue so the public can see the location of the Field Day activities. Tony will seek a permit from the Parks Division of the State Department of Land and Natural Resources.



KE0OG's home QTH, above.

What is “Real Ham Radio”?

By Leslie Hittner, K0BAD

I received my first Amateur Radio License, KN0BAD, as a Novice in 1959. I was in high school at the time. Two of my friends (We were all in Explorer Scouts.) received their licenses as well.

Novice license tests were administered by mail and conducted by local hams – usually the instructor for the code class. They could not be renewed.

At that time, there was only one other license class that was administered by mail and that was the **Conditional Class** license. It was the same as the **General Class** license with respect to the test, code speed requirements, operating privileges; but when it came to upgrading, it did not exist. When I went to a local FCC office to upgrade, I had to take the General Class test all over again (both written and code). Oh, well. At least I was then a “real ham radio” operator!

At that time, there was an ongoing discussion about what was “real ham radio.” Was it Amplitude Modulation (AM) that sounded like broadcast radio? Or was it Single Sideband (SSB) that sounded like Donald Duck? At that time, it was merely the latest in the “real ham radio” discussions that have enlightened the hobby since its beginning.

Was it spark gap or continuous wave? Was it Morse code or voice?

Was it HF or VHF? Now, what about microwave? Is THAT “real ham radio”?

Is “real ham radio” analog or digital?

Is it “real ham radio” to talk to an operator across town or is it working a DX station in Africa?

And is it “real ham radio” to use the internet as a technical version of the ionosphere?

As you can see, some of these discussions involved the technology of the equipment and some of them involved the communications possibilities the technologies enabled.

We are lucky to be Amateur Radio operators, because “real ham radio” is ALL of these things. It is technical, and social. It is individual and interactive. It is local and world-wide. It is skill developing and EMMCOMM.

Perhaps the biggest change to the social part of Amateur Radio was the discovery of VHF/UHF. That is when Amateur Radio became local and social. That is when Amateur Radio clubs began to consider club-owned communications infrastructures. Prior to VHF/UHF



THE PRESIDENT'S CORNER

repeaters, about the only radio clubs in the USA that built costly stations were those few DX Clubs that sponsored DX super stations around the country (I have been to one in Minnesota and one in Wisconsin, but there are others).

When VHF repeaters became “the thing” I was stationed in Pensacola, Florida with the US Navy. The idea of sponsoring a local repeater caused a considerable shake-up in the radio club. HF operators simply didn't want their dues going for a repeater. Others were concerned about their personal liability for damages caused by repeater infrastructure built on a commercial radio tower – or a municipal water tower, or for injuries to club members working on these newfangled devices.

But we managed. Across the country some clubs broke into two different clubs. Others added a fee to the membership dues for those who wished to use the repeater. The ARRL came out with club liability insurance policies – that incidentally also made it easier to find venues for HF activities like Field Day or special event stations.

Yes, ham radio is all of these things – everything. Whether you like working DX, building and experimenting with antennas, designing and building equipment, being on digital or analog, or concentrating on EMMCOMM operating and infrastructure – amateur radio is one of the most diversified hobbies in existence.

Enjoy what you like about the hobby. Because as I said before; it's ALL “real ham radio.”

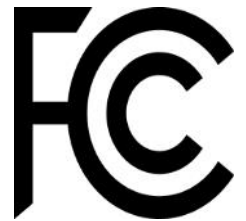
New FCC application fee will not apply to amateur radio license upgrades

The Federal Communications Commission (FCC) staff has clarified in response to an ARRL request that the new \$35 application fee will not apply to most license modifications, including those to upgrade an amateur radio licensee's operator class

and changes to club station trustees. The FCC staff explained that the new fees will apply only to applications for a new license, renewal, rule waiver, or a new vanity call sign. As previously announced, the new fees take effect on April 19, 2022.

“We are pleased that the FCC will not charge licensees the FCC application fee for license upgrade applications,” said ARRL Volunteer Examiner Coordinator (VEC) Manager Maria Somma, AB1FM. “While applicants for a new license will need to pay the \$35 FCC application fee, there will be no FCC charge for future upgrades and administrative updates, such as a change of mailing or email address. Most current licensees, therefore, will not be charged the new FCC application fee until they renew their license or apply for a new vanity call sign.”

ARRL previously reported that the new \$35 application fee for amateur radio licenses will become effective on April 19, 2022. Further information and instructions about the FCC Application Fee are available from the ARRL VEC at www.arrl.org/fcc-application-fee.



WH6XM invites hams to 10GHz HI-CA summer contact event

Robert (Bob) Newcomb Jr., WH6XM, of Hilo is spreading the news of a potentially record-breaking amateur radio event to be headquartered on the Big Island this summer.

"We may be watching history in the making," said Bob.

"I am working with Rex Moncur, VK7MO, and other hams in California. Rex is from Tasmania and is in his 80's. He was first described to me as a "scientist" who has studied atmospheric conditions with radio communications.

"Rex put out an email to other hams in the mainland that are interested in joining him on the island for the project," said Bob. ***(Look up Rex online for a glimpse into his amazing amateur radio career.)***

Rex will be arriving on the Big Island on June 14 and will stay about six weeks. His goal is to attempt a 10 GHz contact between Hawaii and California. His antenna system was expected to arrive in Hilo on April 1.

"This attempt has been tried in the past by Paul Lieb (silent key)," said Bob. "Paul Lieb is responsible for setting up the beacons on Mauna Loa that west coast hams listen for. There is much written history on Lieb on websites and in ham radio books.



Rex Moncur, VK7MO, of Tasmania will be on the Big Island to attempt a 10 GHz contact between Hawaii and California.

"I assume that Rex is trying this now due to his love for the science and ham radio, but most important he is getting older. The travel to Hawaii will be difficult and he is doing most of the work on this side. He will be stay-

ing in Keaau and have his own rental vehicle. One of his biggest concerns was driving on the opposite side of the road.

"I will help him with his work and hope there might be other hams who are able to help him in some way. Being that this is a very serious project for Rex, he does not want any social media type news on the event before he accomplishes his goal. I do think it would be great if someone could document his hard work in writing, videos and photos," said Bob.

"During my short time in knowing him, he is very focused on this project and will spend many hours chasing the ducting conditions. He is also willing to speak to club members and give a talk. I have learned a lot in a short time and he would be able to help others that are interested."

If you're interested, email Bob. His address is listed on QRZ.

ARRL Teachers Institute to offer four sessions this summer

ARRL will offer four sessions of the [Teachers Institute on Wireless Technology](#) in June and July as part of its educational outreach to schools through the [Education & Technology Program](#). The Teachers Institute (TI) is an expenses-paid professional development program intended to provide teachers with tools and strategies to introduce basic electronics, the science of radio, space technology and satellite communications, weather science, microcontrollers, robotics, and amateur radio to their students. The curriculum is designed for motivated teachers and other school staff who want to learn more about wireless technology, gain hands-on experience, and bring that knowledge to their students. Class sizes are limited to 12. The deadline to apply is May 1, 2022.

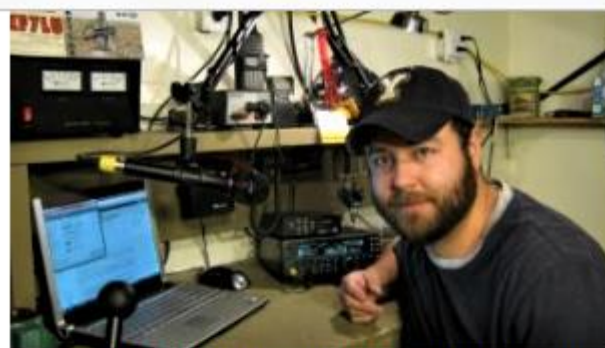
Details at <http://www.arrl.org/>



BIARC full memberships paid as of 2/28/2022

These members have paid dues as of 2/28/2022 and are listed as a basis for achieving the quorum requirements for membership meetings. A quorum of 20% is required to conduct business. Additional members have been added to the roster since 2/28/2022. See <http://biarc.net/members.shtml> for a full list.

Asuka	Darrell	KH6RDO	Adult Full
Barker	Jeffery	AH6VZ	Adult Full
Bush	John	KH6DLK	Adult Full
Ceaser	Sid	NH7C	Adult Full
Chu	Patrick	KH6KL	Adult Full
Critchlow	Leigh	WH6LC	Adult Full
Darling	Barbara	NH7FY	Adult Full
Dowling	Terence	KH6L	Adult Full
Doyle	Steve	WH7TW	Adult Full
Ducasce	Paul	WH7BR	Adult Full
English	Thomas	WH6EBS	Adult Full
Froseth	Lynn	WH6ETX	Adult Full
Froseth	Stanley	AH6K0	Adult Full
Gable	Bev	KH7LM	Adult Full
Greineisen	Bill	WH6GYG	Adult Full
Hittner	Les	K0BAD	Adult Full
Huntley	James	WH6FQI	Adult Full
Kadota	Glenn	AH6EI	Adult Full
Kaul	Hank	KH6HAK	Adult Full
Kealoha	Christopher		Associate
Kitchen	Marvin	WH6DVI	Adult Full
Kitchen	Nancy	WH6DVH	Adult Full
Kubica	Irene	NH7PE	Adult Full
Kunishige	Roylin	KH6KU	Adult Full
Last	Michael	NH7JT	Adult Full
Matsuda	Kyle	WH6FQQ	Adult Full
Meneses	Lydia	WH6DXF	Adult Full
Miller	David	KH6CZ	Adult Full
Miller	Gary	KK6GM	Adult Full
Miller	Paula	WH6FRU	Adult Full
Motomura	Harvey	AH6JA	Adult Full
Okimoto	Ken	WH6EQG	Adult Full
Okinaka	Alan	KH6ATU	Adult Full
Polhemus	William	NH6ET	Adult Full
Punsalan	Jeremy	KH7CN	Adult Full
Punsalan	Rosemarie	NH7FT	Adult Full
Quarberg	Linda	WH6LQ	Adult Full
Robbins	David	K1TTT	Adult Full
Rosenbaum	Joseph	WH6FZH	Adult Full
Sugg	James	AH6AE	Adult Full
Treewater	Gus	K2GT	Adult Full
Uchida	Mary	WH6GLD	Adult Full
Uchida	Melvin	KH6EKD	Adult Full
Urban	Carl	KH7CU	Adult Full
Watanabe	Mark	WH6FSA	Adult Full
Wilson	Doug	KH7DQ	Adult Full



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!

Hall of Fame honoree Miyazawa, SK

The Daily DX reports the passing of Yasuo Zorro Miyazawa, JH1AJT, after a battle with cancer. Zorro, an ARRL member, had been involved in many DXpeditions to some of the rarest locations. He also provided financial support for DXpeditions.

Zorro was the founder of SEISA Group and Foundation for Global Children (FGC). He was deeply involved in humanitarian projects in Cambodia, Bangladesh, Japan, Myanmar, Eritrea, and Bhutan.

Zorro was inducted into the CQ DX Hall of Fame in 2015 and CQ Amateur Radio Hall of Fame in 2020.

BIARC Executive Board Meeting

March 12, 2022

A Begin Meeting

● Call to Order –

- The meeting was called to order at 12:06 pm by Board President Les Hittner.

● Quorum Call

- Present: William Polhemus, Roy Kunishige, Leslie Hittner, James Huntley, Paul Ducasse.

● Secretary's Report and Minutes (2/12/2022)

- William **moved** and Jim **seconded** that the February BIARC Board Minutes be approved as published. Motion **passed**.

● Treasurer's Report

- William **moved** and Paul **seconded** that the Operating Statement and the Funds Summary be approved, subject to audit, without changes. Motion **passed**.



B Member Input and more

- No club members input given.

C Committee Reports

● Digital Systems –

- Written report submitted.

● Education and Outreach -

- Written report submitted.

● Operating Activities -

- Written report submitted.

● Program –

- Written report submitted.

● Public Service Communications –

- Written report submitted.

- **Voice Repeaters –**

- No written Report.
 - Moved to other business.
- Jim **moved** and Paul **Seconded** that that committee reports that were submitted be approved. Motion Passed.
- Tony joined the meeting at 12:12pm.

D Old Business

- **Club Activity Update**

- Les wrote a letter to the county requesting we be able to have our meetings at the Keaau Community Center. In the letter he said we would be willing to pay a fee if it included internet access. They have received the letter.
 - Bob Schneider spoke with an assistant pastor at the Puna Covenant Church. It looks promising, but nothing official yet. We would have access to a kitchen to make coffee and such.

E New Business

- **Committee Memberships and Chairs**

- William **moved** that we maintain the chair and memberships as they currently stand. **Seconded** by Tony. Motion Passed.
 - Tony suggested that it be brought up at the club meeting to solicit anyone who would like to join a committee. Les indicated he would do so.

- **BIARC Station Custodian Resignation**

- Paul submitted a letter of resignation via email.
 - Club Station trustee is responsible for all on air activities with regards to KH6EJ.
 - William **moved** and Jim **Seconded** that we accept Paul's resignation, but it will not be effective until the new custodian is approved by the FCC. Motion Passed.
 - Tony **moved** and Roy **Seconded** to nominate William as Station Custodian. Motion Passed.

- **Field Day**

- Field day sites to be discussed at the club meeting today.
 - Further discussion is deferred to the next board meeting.

- **Email regarding Mauna Loa Site**

- Fred KH7Y want us to remove our HF WYSPR beacon and the 2 Meter antenna, that isn't even ours.
 - William **moved** and Tony **Seconded** that the issue will be referred to the Repeater committee and William will reach out to Don Mussel at NPR to discuss the site. Motion Passed.

- **Voice Repeater Committee**

From previous page

- A channelized receive multi coupler is being designed for all of the high band users to use the Counties top of tower receive antenna. BIARC has offered to pay for the design, and the design cost (time) is being donated by William. Roy **Moved** and Tony **Seconded** that William donate and do the engineering for the community receive antenna at Kulani Cone. Motion Passed.
- Tony asked for a letter that states the value of the engineering work William is donating.

There being no further business, Les adjourned the meeting at 13:07 pm HST.

Respectfully submitted,

James R. Huntley, Secretary

All hams invited to participate in April 16 ARES COMEX

The next ARES COMEX will be held Saturday, April 16th between 9 am and noon. This drill simulates a severe weather event with high winds, heavy rains, as well as loss of grid power and conventional communications. The statewide COMEX takes place on multiple bands and modes, using hub and spoke configurations for voice, as well as Winlink digital modes.

The COMEX is based on the Incident Command System through the development of an Incident Action Plan, which is a collection of ICS forms. The goal is to move messages via RF to/towards the Emergency Operations Center (EOC) on each island, or to the Auxiliary Communications Service (ACS) in the case of Hawaii County.

Each participant generates message traffic, based upon simulated circumstances, called "injects." You will be sent the Inject by email the night before or morning of the COMEX. The email subject line contains the time the inject is to be opened. Players read and respond to the situation presented, based upon their assessment of the priority of the

situation, their station capabilities, geographic area, and other factors. An operator at the EOC or ACS will respond to your message, and the response is to be relayed back to the field station via relay as needed.

Each "player" checks into local nets, receives situational awareness traffic from their simulated EOC, may assist with relays, and crafts a response to their own "Injects." These injects are designed based upon potential hazards identified in the community you specify, where you intend to operate from. You would typically use an ICS-213 form/format or the applicable ACS form in the case of Hawaii County. You will need to sign up for the COMEX and answer some basic questions about your operating bands, modes, etc. in order to participate.

Please use this sign-up link <https://docs.google.com/forms/d/e/1FAIpQLSfzVLdAOjuD8r6paeyKali8hwag4AtSX2Vg-QjnUQSlaukW7Q/viewform> and complete the on-line form provided. After sign-up, you will be

sent a confirmation link via email, which includes a button that allows you to modify your sign up response prior to the COMEX as needed.

Each district has their own ICS-205 Incident Radio Communication Plan, as well as an ICS-204 Assignment List, which defines hub(s) and may list designated relays stations for your area. We are still seeking stations to fill these roles in some areas. These ICS forms will be updated prior to the COMEX, as we receive information from new participants, and refine communication plans. If you wish to register as a hub or designated relay station, contact your ARES district or community emergency coordinator, or a member of the exercise planning team on your island.

Please see the situation manual/ground truth document at https://hawaii.ares.net/commex_apr162022.php for details and contact points. We encourage all licensed amateur radio operators to sign up, even if you are unsure if you will be able to participate.

73,
Hawaii ARES Planning Team

Annual Armed Forces Day Cross-Band exercise is May 14

The 2022 running of the Armed Forces Day (AFD) Cross-Band exercise will be held on May 14, 1300 - 2200 UTC. A complete list of participating stations, modes, frequencies, times, and other details were to be announced on April 1.

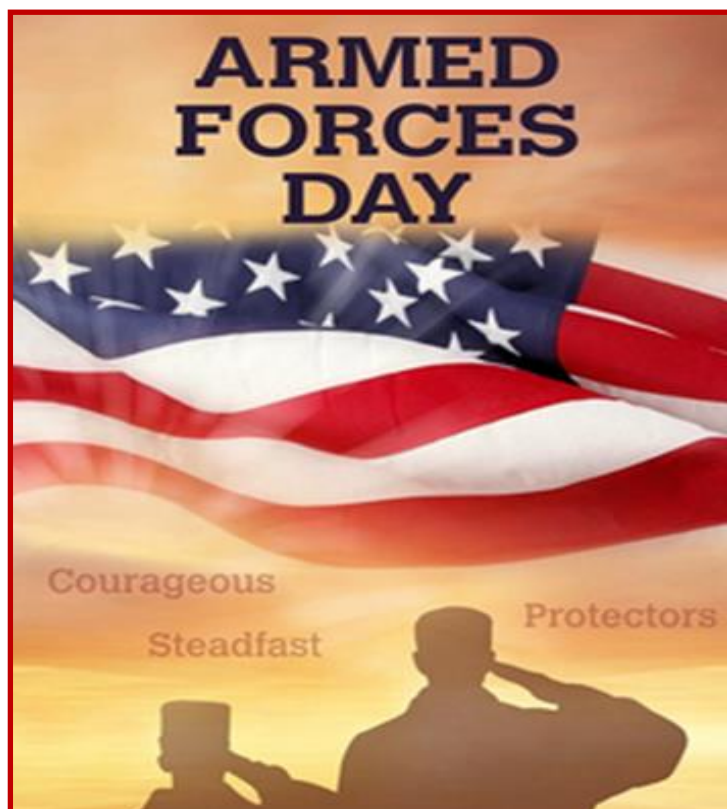
The event is open to all radio amateurs. Armed Forces Day is May 21, but the AFD Cross-band Military-Amateur Radio event traditionally takes place one week earlier in order to avoid conflicting with Dayton Hamvention®.

During the exercise, radio amateurs listen for stations on military operating frequencies and transmit on frequencies in adjacent amateur bands.

Military and amateur stations have taken part in this event for more than 50 years. It's an exercise scenario, designed to include ham radio and government radio operators alike.

Per previous announcements: "The AFD Cross-band Test is a unique opportunity to test two-way communications between military communicators and radio stations in the Amateur Radio Service, as authorized in 47 CFR 97.111.

These tests provide opportunities and challenges for radio operators to demonstrate individual technical skills in a tightly controlled exercise scenario that does not impact any public or private communications."



Military stations in various locations will transmit on selected military frequencies and announce the specific ham band frequencies they are monitoring.

An AFD message will be transmitted utilizing the Military Standard (MIL-STD) serial PSK waveform (M110) followed by MIL-STD Wide Shift FSK (850 Hz RTTY), as described in MIL-STD 188-110A/B. The AFD message will also be sent in CW and RTTY.

WHAT IS RF AND WHY DO WE USE IT?

"RF" REFERS TO THE USE OF ELECTROMAGNETIC RADIATION FOR TRANSFERRING INFORMATION BETWEEN TWO CIRCUITS THAT HAVE NO DIRECT ELECTRICAL CONNECTION.

TIME-VARYING VOLTAGES AND CURRENTS GENERATE ELECTROMAGNETIC ENERGY THAT PROPAGATES IN THE FORM OF WAVES. WE CAN WIRELESSLY TRANSFER ANALOG AND DIGITAL DATA BY MANIPULATING AND INTERPRETING THESE WAVES.

