

# The Big Island Amateur Radio Club Newsletter

Hawai'i Island  
August 2014

[www.remotehamradio.com](http://www.remotehamradio.com)

## Members keep busy on many fronts this summer

### News flash:

Due to incoming severe weather patterns and anticipated recovery efforts, the BIARC meeting scheduled for 9 August will not be held. The next meeting will be the regularly scheduled meeting on 13 September.

— 73, Milt Nodacker, AH6I



Joe Speroni, AH0A,  
discusses remote ham radio.

### BIARC general membership meeting minutes July 12, 2014

President Bill Hanson, N0CAN, convened the meeting at 2:15 p.m., a few miles around the corner and down the road from our regular venue after a bit of dithering and an APB sent out for an alternate meeting site after the Keaau Community Center turned out to be double-booked. When the board arrived for a noon meeting, we found balloons, festive scurrying around and happy faces gearing up for a 3 p.m. family party in honor of a recent high school grad.

After a couple of ideas failed to pan out, Vice President Milt Nodacker, AH6I, offered use



Members man  
the booths at  
Field Day at  
Hilo Walmart.

BIARC  
photos  
by Linda  
Quarberg,  
WH6LQ



of a meeting room at the Orchidland LDS Church. He happened to have the keys for access and — adding to the happy feeling — when we arrived at our new destination on this seriously sultry Puna afternoon — we were informed by Treasurer George Bezilla, WH6EFN, that this wonderful conference room recently had been enhanced with an air-conditioning unit.

Also in attendance: Director John Mwetangmwai Bush, V63JB; Paul Lakin, WH6DYX; Robert Oliver, NH6AH; Linda Quarberg, WH6LQ; Doug Wilson, KH7DQ; Director John Buck, KH7T; Jim Tatar, WH6EMN; Sharon McCartin, WH6ELV; Joe Speroni, AH0A, and Secretary Leigh Critchlow, WH6DZX. Milt announced that VE testing for all levels of licensing will be done at 6:30 p.m. Thursday, July 24, at the Kilauea LDS Church. The next Technician class will begin at 6:30 p.m. at the Kilauea church on Aug. 7, running for six consecutive Thursdays, with testing on the seventh Thursday evening. On Oct. 2, he will start a Technician class at the Orchidland church.

At next month's program Jim Kennedy, K6MIO, will discuss "Adventures in Earth-Moon-Earth Communications" (As a side note: Jim is looking for a 1/4-inch reel-to-reel tape machine to use in his presentation. Anyone out there have such a vintage piece of equipment they could loan him for the presentation?) and the club will prepare for the Fox Hunt to be held at the September meeting. Attention: Everyone bring your VHF handheld radios to the August meeting, and of course in September, as well. Milt also announced that six people passed their Technician test on Field Day at Wailoa Center. (Welcome to new ham and new BIARC member Romeo H. Saquing.)

President Bill passed around a sign-up sheet for the July 26 Repeater Work Day excursion to clean up the Pepeeko Repeater site. Interested? Meet up at 8 a.m. at Civil Defense. As Bill noted: We don't pay rent, or electrical bills, to use the repeater sites, so it's even more important to be good tenants. Other Repeater Work Days are scheduled.

Robert showed slides of the Field Day setup at Wailoa Center on June 28 and thanked everyone who showed up to help out with the high-frequency operations. "We made contacts all over the country," he said, for a total of



The Fourth of July in Volcano kept BIARC members busy with various assignments and a family day held after the annual community Independence Day program was a hit at the home of hosts Doug Wilson and Linda Quarberg, as illustrated by accompanying photos.

56, computing (with multipliers and other extra points, including a doubling for low power) into 274 points. Milt noted: "We had a lot of people get their first taste of HF" and folks also got experience doing the computer logging of contacts and supporting data. "We had a very good Field Day at Wailoa Center," said Milt. Beau Mills, NH7WV, showed up at about 4 a.m. and made another five contacts. Robert said the experience was better, all around, than in 2013, when "a solar event" interfered with HF operations. "We did very well this year," he reported.

Doug noted that the Walmart operation went well. Six tables were set up, plus (courtesy of Beau) the HELCO "green truck" promoting solar energy, etc. There was lots of interaction, lots of information and lots of traffic walking through the Field Day section of the Walmart entrance. Volunteers collected a page and a half of folks signing up for Milt's Tech class, plus others interest in a proposed CW class. Harvey Motomora, AH6JA, manned the digital table, where a number of demo contacts were made via the WINN System.

Guest speaker Joe Speroni next brought us an update from his presentation last year on Remote Ham Radio — [http://](http://www.remotehamradio.com)



The food was ono, the weather was good and the conversation and company were fine at the BIARC family day in Volcano Village.

[www.remotehamradio.com](http://www.remotehamradio.com).

Launched with heavy-duty super stations in New York, the service has grown from 3 premium-service stations to 5 stations, with 100-foot towers, in Summit, NY; Blueberry Hill, NY; Murrieta, Calif.; Reno, Nev.; and Sicily, Italy. The premium service is used by DX hunters with a fixed annual fee for basic use and a per-minute charge if you exceed your limit.

In March, RHR launched a new service, Web DX, with a totally software-based service which Joe demonstrated at the meeting. Web DX has 5 stations — 4 in NY and 1 in San Joaquin Valley, Calif., which is the one he connected with at the meeting. There are 5 more stations under development in W1, W4, W6, W7 and KH6, which will be up and running on Oahu in a month or two.



He passed around the analog portion of an Elecraft K3 to show how a laptop/usb cable/analog K3 combo will let an operator get connected without a modem. Using a smart phone, Joe demonstrated how he can connect with the Web DX KH6 station on Oahu. He wasn't able to connect at that time, but says he has worked it successfully, even "while taking a bath." He also demonstrated the CW link.

For more details, visit <http://www.remotehamradio.com>.

Joe also introduced the membership to the remotehams.com service now being developed as one of the first services for people living in condos who want to use HF, but are prohibited from putting up antennas. Elecraft is promoting this, and has been developing the support technology.

"The idea is to help the ham community grow by sharing stations," said Joe. At present, the interface is solely Windows-based, using RCForb Client software.

"One of the beauties of this is that it supports multiple audio streams," said Joe, "in addition to the fact that it's free." There is a special version of this software for repeaters. Visit <http://www.remotehams.com>.

The future looks good, he said: "You're going to be able to sit at an iPad and run a remote HF station." Again, a main benefit: "It shares HF access with QTH-challenged hams."

After a round of applause, the group moved to a nearby outdoor area for refreshments provided by Milt, husband of BIARC Hospitality Chair Jean Nodacker, WH7WT. We enjoyed chips, soda, three varieties of cookies, neapolitan ice cream and refreshing ice water. Milt received many compliments on the repast, but noted it may have lacked the originality and gourmet touches for which Jean is famous.

The business meeting followed, but due to lack of quorum, no binding action was taken. Bill thanked everyone for helping with Field Day, which proved successful at both locations. The Fourth of July in Volcano also kept BIARC members busy with various assignments and a family day held after the annual community Independence Day program was a hit at the home of hosts Doug Wilson and Linda Quarberg.

Bill introduced some changes to the BIARC calendar: July 26 will be a "house cleaning" at the Pepepee repeater to show that we're good tenants; at the Aug.



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9 membership meeting, everyone is encouraged to bring their handheld transceivers so we can get prepped for the fox hunt to be held at the Sept. 13 meeting.

Also, volunteers are invited to help at the Aug. 30 second annual Puna Regional Emergency Preparedness Fair from 9 a.m. to 3 p.m. at Keaau High School. BIARC won't have an exhibit this year; instead, there will be a youth amateur radio table in support of forming radio clubs at island schools. The goal is to "plant seeds," get the kids talking about the opportunities, and support the eventual development of such valuable programs. Other opportunities upcoming: Aug. 23 ARRL Kids' Day; Sept. 27 work trip to Kulani repeater; Oct. 4 Mauna Loa repeater work day, postponed from May; Oct. 18 Hamfest in Waimea (no general membership meeting in October); election of new officers and directors at November membership meeting; Christmas party and induction of new board at the regular meeting time in December (no business meeting in December).

Joe encouraged members to

## QSL Bureau report

Barbara Darling, NH7FY, who just returned from a family reunion on the mainland, emailed in her monthly QSL Bureau report.

In May, 825 cards came in from England, Russia, Brazil, Singapore, Slova-

kia, Romania and Mexico.

In June, the QSL Bureau received 129 cards from Sweden, England, Puerto Rico, Romania and Maryland.

These bring the year-to-date total to 5,731, said Barbara, the bureau chief.

participate in the annual Hawaii QSO Party from 6 p.m. Friday, Aug. 22, to 6 p.m. on Sunday, Aug. 24. He noted that last year, BIARC contributed \$200 toward the cost of certificates and plaques for the 48-hour competition on bands ranging from 10 to 160 meters. He asked for the group's consideration of a similar donation toward this year's awards costs. Lloyd Cabral, KH6LC, and Curt Knight, AH6RE, will again coordinate the creation and distribution of the awards.

"It's a great opportunity for

stations to do HF operations," said Joe, noting that the antennas of hamshacks outside of Hawaii all will be pointing toward the 50th State in hopes of making lots of contacts. A vote on the donation request will be taken when a quorum is present at the Aug. 9 BIARC meeting, which will be at the regular time and place: 2 p.m. at the Keaau Community Center. Meeting adjourned at 4:26 p.m.

*Respectfully submitted,  
Leigh Critchlow  
Secretary*

# Big Island Amateur Radio Club

P.O. Box 1938, Hilo, HI 96721

[www.biarc.net](http://www.biarc.net)

## Officers for Calendar Year 2014

President: Bill Hanson, N0CAN, 989-4700

Vice President: Milt Nodacker,  
AH6I, 965-6471

Secretary: Leigh Critchlow, WH6DZX, 930-7330

Treasurer: George Bezilla, WH6EFN, 961-6323

## Directors — 2014-2015

Toni Robert, N0INK, 937-2183

## Directors — 2013-2014

Mary Brewer, WH6DYW, 985-9595

John Buck, KH7T, 885-9718

John Bush, KH6DLK/V63JB, 935-5500

(Club License Trustee:

Paul Ducasse, WH7BR, 985-9222)

## Standing Committees (as of December)

Service/Awards: vacant

Education & Testing: Milt Nodacker, AH6I

Emergency: Paul Ducasse, WH7BR

Equipment: Milt Nodacker, AH6I

Health & Welfare: Barbara Darling, NH7FY

Membership: vacant

Hospitality: Jean Nodacker, WH7WT

Newsletter: Leigh Critchlow, WH6DZX

Repeater: Bob Schneider, AH6J

Webmaster: Curt Knight, AH6RE

## Special Committees

Hamfest Chair: Bob Schneider, AH6J

co-Chair: Doug Wilson, KH7DQ

QSL Bureau Chair: Barbara Darling, NH7FY

## Meetings and Get-Togethers

Membership meetings: Second Saturday of each month at 2 p.m. at the Keaau Community Center

Friday Lunches: A group meets for lunch every Friday at 11:30 a.m. at Kow's Chinese Restaurant in Hilo at 87 W. Kawailani St., just above Kinoole Street behind the Shell station.

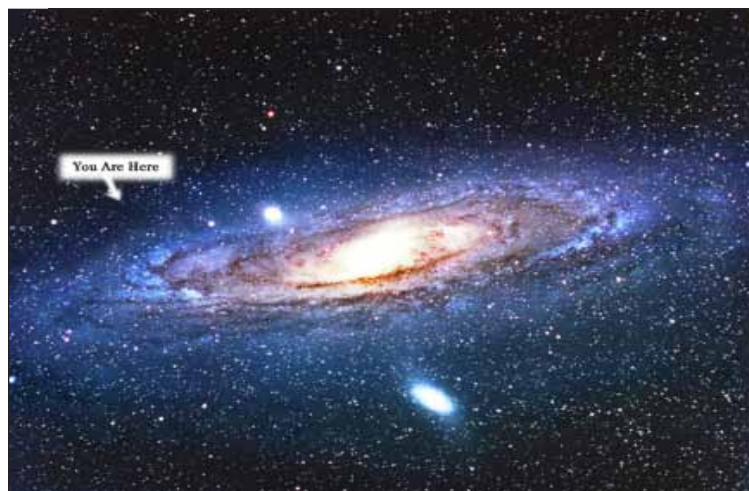
## East Hawaii Net

The East Hawai'i Net meets on Monday, Wednesday and Friday mornings at 8AM HST on the 146.76 MHz repeater.

## ARES Emergency Net

Meets Saturday evening at 1900 HST on the 146.76 repeater. Backup is 146.76 simplex.

All are welcome to check in.



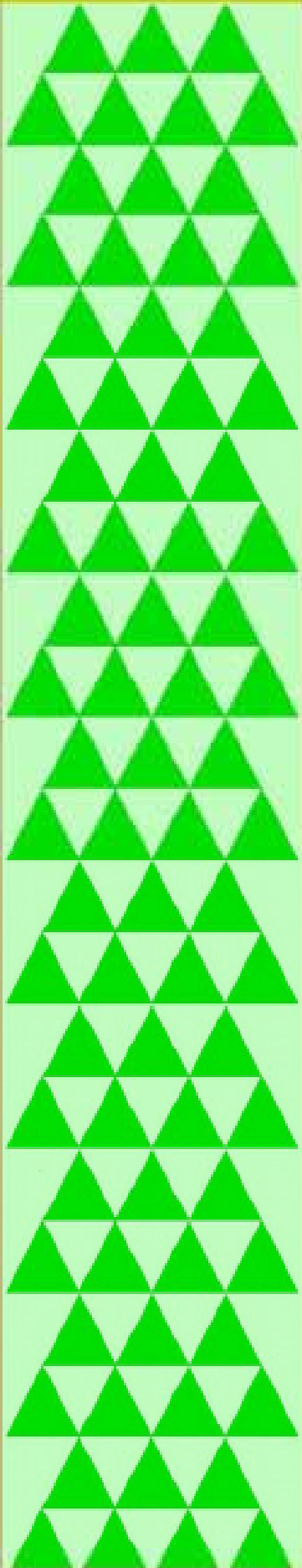
## Repeaters

\* Linked to other repeaters covering the Big Island and Maui.

\*\* Linked to the WIN system, which includes 71 repeaters in the US, Australia, Canada and Japan.

\*\*\* Linked to the XO network, Hawai'i statewide. Contact WH6FM for info.

Frequency:	Trustee:	Location:	Tone:
*145.29-	WH6FC	HOVE - Ka'u	100 Hz
146.66-	(TBS)	Ocean View	100 Hz
146.68-	KH6EJ	Kea'au (limited range)	none
*146.76-	KH6EJ	Kulani	none
*146.82-	KH6EJ	Mauna Loa ARES	none
146.88-	KH6EJ	Pepeekeo, linked for emergency only	none
*146.92-	KH6EJ	Ka'u Police Dept	none
*146.94-	KH6RS	Haleakala Maui Civil Defense	110.9 Hz
147.02+	KH6HPZ	Haleakala Maui RACES	103.5
147.04+	KH6HPZ	Mauna Loa RACES	none
*147.16+	WH6DEW	Hualalai Kona	100.0 Hz
*147.32+	NH7HI	North Hawai'i Comm. Hospital Hilo	100 Hz
*147.38+	KH7T	Waimea East (experimental)	none
*442.35+	KH6RS	Kaanapali Maui	136.5 Hz
*442.50+	KH6EJ	Kea'au	none
443.40+	KH7MS	Kona	100.0 Hz
443.40+	KH7MS	Ocean View	77.0 Hz
443.65+	(TBS)	Ocean View hub and standalone repeater	none
*444.225+	KH6RS	Haleakala Maui Civil Defense	110.9 Hz
*444.45+	KH6EJ	Parker Ranch GS Camp	88.5 Hz
***444.90+	WH6FM	Hilo - linked to WIN system	100 Hz
***444.775+	WH6FM	Hilo - linked to XO network	123 Hz



# 2014 Hawaii QSO Party

The 2014 Hawaii QSO Party will take place over the weekend of 23 – 25 August. Join us and win one of these handsome certificates with your own call sign in this spot! For more information:  
[www.hawaiiqsoparty.org](http://www.hawaiiqsoparty.org)

Curt Knight AH6RE  
For the HQP Awards Committee

Sponsored in cooperation by:

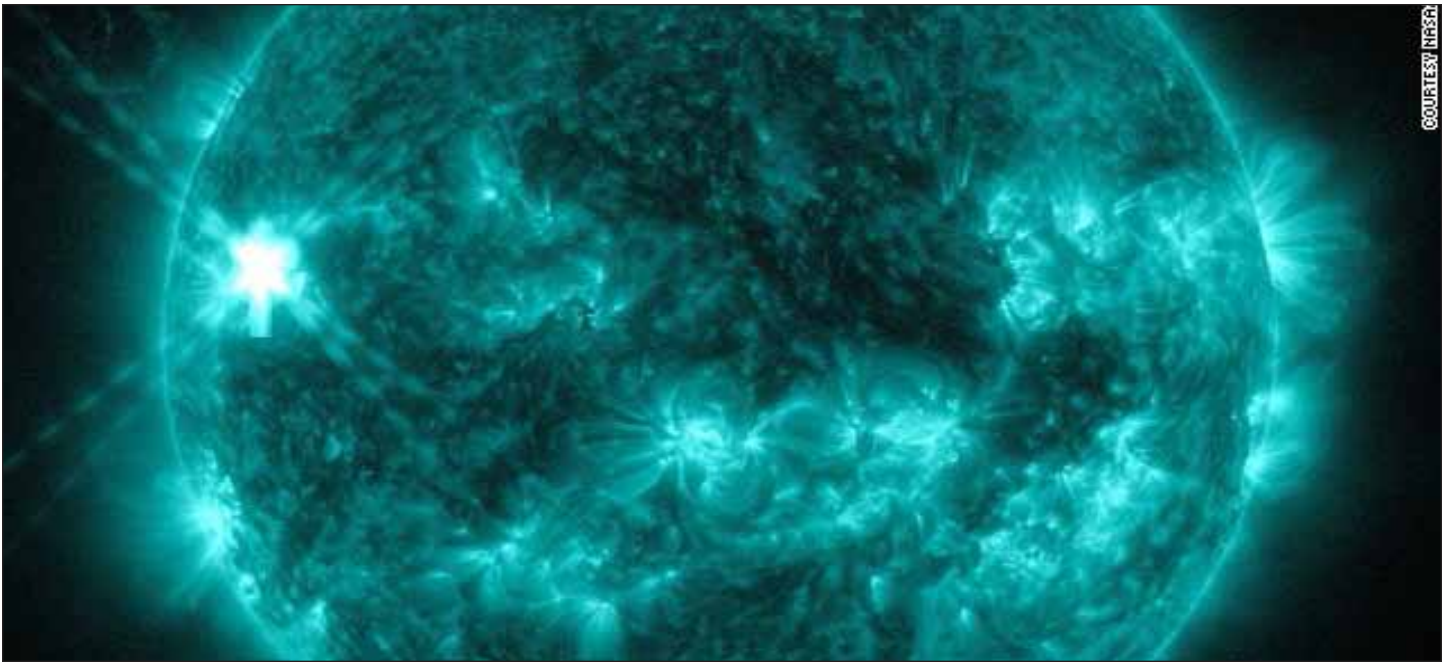
Battleship Missouri Amateur Radio Club  
Honolulu Amateur Radio Club  
Maui Amateur Radio Club

Big Island Amateur Radio Club  
Hilo Amateur Radio Club  
Waikiki Amateur Radio Club

Emergency Amateur Radio Club  
Eoelou Amateur Radio Club  
EHSLC Contest Group







## Whew, that was a close one! Study: Massive solar storm barely missed us

*(This article is good reading, provided by Milton Nodacker, AH6I, and Steven Jacquier, WH6DPM, as a follow-up to the recent BIARC Solar Flares program.)*

By **CARTER MAGUIRE**  
CNN

*(Updated 4:16 PM EDT,  
Fri July 25, 2014)*

**(Teal pic)** A mid-level flare erupted on the left side of the sun on July 8, 2014. This image from NASA's Solar Dynamics Observatory highlights the high-temperature solar material in a flare, which is typically colored in teal.

**(Orange pic)** The Solar Dynamics Observatory captured this image of the sun during a flare that peaked at 7:44 a.m. ET on July 5, 2012.

**(CNN)** — “Here comes the sun” indeed, and it was just barely all right.

Two years ago, modern infrastructure came very close to a serious disruption. The culprit? One of the largest solar storms in recorded history.

Plasma exploding from the surface of the sun in a coronal mass ejection barreled through space and crossed through Earth's orbital path on July 23, 2012.

### Beautiful solar flares caught on camera

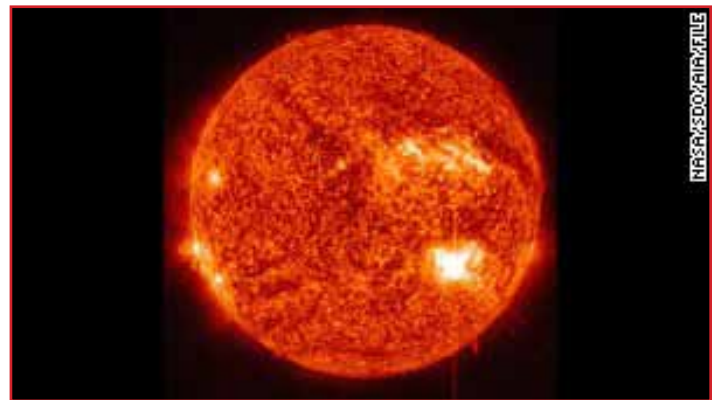
If the flare had erupted about one week earlier, Earth would have been squarely in the line of fire, Daniel N. Baker wrote in a study published in the journal *Space Weather*. (Baker is with the Laboratory for Atmospheric and Space Physics at the University of Colorado).

The Solar Dynamics Observatory captured this image of the sun during a flare that peaked at 7:44 a.m. ET on July 5, 2012.

The Solar Dynamics Observatory captured this image of the sun during a flare that peaked at 7:44 a.m. ET on July 5, 2012.

This is not the first time solar activity has threatened Earth.

A massive solar storm in 1859, dubbed the Carrington Event after the English astronomer who witnessed it, caused the northern lights to appear as far south as Cuba; and it caused telegraph lines



to spark, setting fire to a number of buildings, according to Science@NASA editor Dr. Tony Phillips.

“According to data from the STEREO-A spacecraft (a solar observatory), the solar storm of July 23, 2012, was every bit as potent as the Carrington storms,” he said. Baker said that had our planet been in the path of the storm, it would not be inconceivable that we would still be “picking up the pieces.”

Phillips agrees. “As society relies more and more on high technology such as GPS, the Internet, satellite communications and smart power grids, we also expose ourselves more and more to the dangers of stormy space weather.”

He added that power outages

after the storm could have persisted for many months. If the solar storm had hit, much of Earth's technology would be rendered inoperable: from radios and GPS systems to toilets.

Though human beings would not be physically harmed directly, a study by the National Academy of Sciences estimates that damage from a coronal mass ejection of similar magnitude could exceed \$2 trillion in the United States and pose risks to national security.

While Earth did get lucky in 2012, humans should not get too comfortable. Despite the relatively mild conditions on the sun, solar storms are unpredictable.

According to Baker, “incredibly powerful” space weather is possible at any time.

# More Field Day activity on Big Isle

Subject: KH6HME  
Field Day at KH7Y  
South Point

Thanks to all for a great time here. Tommy, the steaks were the best, the fellowship was wonderful.

The bands were not the best to start, but by the time Dave, K6WDE started to operate he opened the bands for sure. At about midnight we were working Europe with 20 over signals.

We made 863 QSOs — 533 on CW and the rest on SSB — for a final score of 1,146.

Not bad for a part-time effort, and we sure had fun.

Also we had visitors from Japan — Shige, JH1GNU, and his XYL.

It was nice to see Shige.

We have worked him many times in the past, and most recently on six meters.

Shige is well known for his QRP work and very near a 6 band DXCC!

Thanks again, everyone, let's plan to do it again.

*Aloha,  
Fred KH7Y*



*Photo by Shigeru Hiratsuka, JH1GNU*

KH6HME Field Day efforts at KH7Y South Point produced 863 QSOs — 533 on CW and the rest on SSB — for a final score of 1,146.



*KH6LC photos*

More Big Island Field Day activity. Shigeru Hiratsuka, JH1GNU, whose QTH is Kanagawa, Japan, and his XYL visited KH6LC, Lloyd Cabral, in Hawaiian Paradise Park. Lloyd reports that "Shige is a very active QRP DXer from Japan. We've worked him countless times over the years."



Field Day at KH6LC: Operator Carl Byck, KH7BB, of Keaau made 954 SSB contacts.



## 10-meter mission in 2014

# Here's a fun, easy way for Techs to get on HF



Photo by Curt Knight, AH6RE

All Technician Class Licensees have 10-meter privileges, so try your hand on HF!

For further details, check out [www.ten-ten.org](http://www.ten-ten.org).

The Aloha Chapter of Ten-Ten International Net, Inc. meets on 28.490 MHz, with an alternate frequency of 28.487MHz, every Monday evening at 6:30 p.m. HST. If you don't hear me, don't just listen, call "CQ!" Help keep 10 meters in amateur radio hands.

Thanks and aloha.

--- Irene, NH7PE



## CQ: Contest, CQ: Contest ...

### Summer Phone QSO Party was a hit

The 10-10-International Summer Phone QSO Party was a lot of fun, even though propagation wasn't always good. The contest ran over 48 hours on Aug. 2-3. For such contests, it is strongly recommended that operators use logging software specifically designed for 10-10 contests.

Especially for dedicated contest loggers, there are excellent programs: K4HAV's Win 10-10, at <http://hds.net/win1010.htm>, or N1MM's [www.n1mm.com](http://www.n1mm.com) or N3FJP's [www.n3jfp.com](http://www.n3jfp.com); GenLog and 10-X Logger, also, speed up things during a contest.

NH7PE traveled to Washington state in July, but was only able to visit Ralph Fontaine, AH6RF, and Maureen, KH6MF, by

telephone. They are both well, and were expecting visitors from Hawaii the day we talked. Soon, they will be cruising, this time heading to the North Pole!

They will travel to Holland and Germany, then join their ship to cruise to the edge of the Arctic ice pack, before heading home. Their ship will leave Russia and cruise north around Finland, Sweden and Norway, passing close to Svalbard.

We wish them well!

The Aloha Chapter Net is held Monday evening at 6:30 p.m. (Tuesday, 0430 UTC). Irene, the net control, tries to stay on the air for at least 15 minutes before closing the net, if there are no other check-ins. That time is filled with 10-10-International news and DX information (many are possible on 10 meters).

And remember: Every Tuesday night at 7 p.m. HST, the High Frequency ARES Net meets on 7.088MHz. Check it out. Will you be able to help in an emergency?

73 and 88,  
Irene, NH7PE



Photo by Lloyd Cabral, KH6LC

Veteran operator Irene Kubica, NH7PE, at left, introduces Leigh Critchlow, WH6DZX, who is new to HF, to the world of contesting during the 10-10-International Summer Phone QSO Party on Aug. 2.

### BIARC Newsletter

Story/photo/ad submittal deadline  
for September edition: August 20  
email to [lcritchlow@mac.com](mailto:lcritchlow@mac.com)



# ARRL News

*From ARRL Pacific  
Section/Section Manager  
Bob Schneider, AH6J:*

— As was mentioned last month, we are looking for someone to be the Section Youth Coordinator (SYC). It is a brand new, section-level ARRL Field Organization appointment that is available and ready to be filled as soon as we have someone for the position.

For the appointment guidelines that describe the requirements and responsibilities, visit: <http://www.arrl.org/section-youth-coordinator>.

If you are interested, or know of someone who would be just right for the job, let the SM know.

Saturday October 18, is the Big Island International Hamfest.

The Kohala-Hamakua Radio Club, or “KHRC,” is the lead this year, however other clubs such as BIARC, KARS, SPARC and others will be assisting.

It is at the Waimea Community Center as in the past.

Steve Milner, WH6N, (president) reported that the Waimea Hamfest will occur on this date.

Doors open at 8 AM HST for setup. Trading starts at 9AM. Waimea is also known as “Kamuela” to distinguish it from the other Waimea(s) in the state of Hawaii.

No announcement of testing has been made, however in the past, testing started after lunch at about 1 PM.

Parking is limited and we expect a couple spots will be coned off for loading only.

In the past, there have been games in the next door ball field, which makes parking even tighter.

Come early if possible.

The Kohala-Hamakua Radio Club (KHRC) website:

<http://www.hamradioandmore.com/khrc.htm>

Check the website for more information.

## ‘Repeater 101,’ an introduction

*Explaining the 146.760 Repeater, the workhorse of Big Island amateur radio, and how the equipment and process work:*

The 76 repeater is an “open” repeater, as opposed to a “closed” repeater.

There are certain hams and ham clubs across the nation that only allow their group/club members to use their repeaters.

Those types of repeaters are called “closed” repeaters.

Also there are hams that own their own repeaters that are being used for

private use only and they do not allow others to use their repeater. Those are also closed repeaters as opposed to open repeaters.

The 76 repeater is a linked system that involves numerous repeaters and is a loose association of 5 or more radio clubs with their repeaters linked to provide a linked communications system.

Each of the repeaters is linked via UHF links and each link has one or more “control operator(s)” that can turn on or turn off the link.

When there is misuse of the linked system tying up multiple repeaters any control operator for the individual repeaters can make the independent decision to drop their repeater off of the linked BIWARN system.

A good example of this is the WIN system that links 80+ repeaters around the USA.

Almost daily a control operator is dropping off a repeater or two due to the improper actions of another ham radio operator.

*Paul Ducasse,  
WH7BR*

## Please spread the word!

*From the ARRL web page*

### **New FCC Exam Element Credit Rule**

The FCC now offers partial credit for expired General, Advanced or Extra Amateur Radio licenses. A license that has expired and gone beyond the two year grace period will be canceled in the FCC system.

At a minimum, previous license holders must take the current 35-question Technician exam and provide proof of the expired license at a VE exam session to return to Amateur Radio. The FCC will issue a new call

sign and a new license when the Technician exam is passed.

### **FCC upgrade for pre-1987 Technician to General**

The FCC also offers partial credit for pre-1987 Technician licenses.

FCC Rule 97.505(a) offers partial credit to pre-1987 Technician licenses.

If an applicant held a “Technician” prior to 3/21/1987, and has proof, the FCC will afford credit for the General (Element 3) written exam only.

— John, KH7T