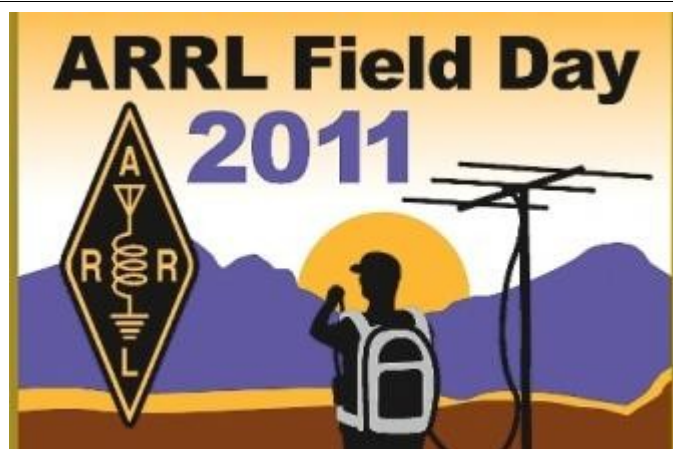




Big Island Amateur Radio Club

Newsletter – August 2011



BIARC Field Day 2011

For many in the setup crew, Field Day 2011 began at 5 AM with a big breakfast at Ken's. My hat is off to those who were able to finish a Ken's omelet at that time of day, and then climb a tower, even a short tower, afterward.



6 AM: Bob AH6J starts the coffee pot

We got started at the Wailoa Center by about 6, with two different groups of antenna engineers working to assemble the three Yagi antennas that were used. One was Milt Nodacker AH6I's impressive brand new multielement tribander that was destined to be put on Lloyd's crankup tower on the makai side of the Center, the second was Lloyd KH6LC's three element beam that ended up almost 100 feet up on the crane truck that Lloyd brought, and the third was the tribander that was used at field day last year and this year was dedicated to 10 meter operation and the GOTA station that was run on battery and solar power, supervised by Irene NH7PE.



Matt WH7XM and Lloyd KH6LC assemble a Yagi

In addition to the Yagis, there was a 40 meter ground plane from Robert NH6AH, set up on the makai side of the building, an 80 meter tape-dipole from Bob AH6J hung in an inverted V from the ball on the crane, and a 40 meter vertical dipole from Curt AH6RE also hung from the ball. So there were six HF antennas available in total.



Milt AH6I's Yagi on its way up

We used Lloyd's Kenwood TS450 in the CW position, with an older Dell desktop computer that Lloyd provided, and Paul WH7BR's Icom 7600 radio in the phone position, with an Asus eee-pc loaned by Bill KH7E and Doris KH6ER Carlson. Logging was done with N1MM logger software.



First SSB contact: Barbara NH7FY

The setup didn't go very smoothly, but by 10:30, after I don't know how many trips to the Ace Hardware, we had the antenna up on the crane truck and the first contact was made, on 20 meters CW. 15 meters was in much better shape and we shifted operation there almost immediately while work continued on getting the second Yagi up on the crankup tower. Barbara NH7FY made the first phone contact at 12:30 and the second Yagi was erected at about this time.

Conditions weren't too good initially, but later on 15 meters was hot and 20 meters was open most of the night, so from

an operations standpoint this field day was very successful. This is clear from the band-mode summary:

Mode	Band	Total
CW	3.5	11
CW	7	100
CW	14	192
CW	21	68
LSB	3.5	8
USB	14	274
USB	21	341
Total	All	994



CW station Yagi and GOTA Yagi

In addition to making almost 1000 contacts, the contacts were well distributed, representing every ARRL section except NNY and WV, and all RAC sections except AB, NL, NWT, and QC.

Lunch was provided by the Club, and took the form of a choice of goodies from the Subway. Dinner was pot luck and was enjoyed by all.



Antenna engineers (or is it jigsaw puzzle assemblers) at work



The 40 meter GP is at the left [NH6AH photo]

* * * * *

We had 44 attendees: 18 visitors, 2 helpers, 6 children, 13 club members and 5 visiting hams. Unfortunately, the Mayor did not show up nor did other elected officials, so next time we should resolve to start political invites earlier.

In Field Day action elsewhere, Fred KH7Y and his grandson Mike W6YKM operated KH6RZ from Fred's home in Ocean View using emergency power, making 841 Qs, including about 10 to the mainland on 6 meters. Fred and Mike had planned to head to Hilo, but they were having too much fun and stayed home.



GOTA station assembly



Mike W6YKM operating at KH6RZ

There was a VE session conducted by Milt AH6I. Three people tested, and two were successful. Gerald Reiss, NH7WW, upgraded from Technician to General, and Del Winn WH6DTL is a new Technician. Congratulations.

Contributors: Robert NH6AH, Milt AH6I, Curt AH6RE, Fred KH7Y.



This Month's Header Picture

The picture at the beginning of the newsletter is one view from the site of Field Day 2011. The aiming point for the U.S. Mainland is the center arch of this bridge.

Big Island Amateur Radio Club

P.O. Box 1938

Hilo, HI 96721

www.biarc.net

Officers

President	Tom Thornton AH6ZZ	754-7412
V.P.	Milt Nodacker AH6I	965-6471
Treasurer	Lloyd Cabral KH6LC	966-7782
Secretary	David Broyles KH7SO	854-0362

Two Year Directors

Beau Mills NH7WV	968-1271
Richard Fetchen KH6WE	982-7426
Paul Agamata WH6FM	
Elizabeth Yoes WH7CU	965-5429
Chuck Epperson AH6SC	966-4698
Rick Gardner WH6LU	

One Year Directors

Richard Darling AH7G	982-9126
Ron Phillips AH6HN	982-6513
Rick Frazier AH7H	985-9169
Bob Schneider AH6J	966-8146
Peter Yoes KH7HI	965-5429

Standing Committees

Service/Awards	Ron Phillips	AH6HN
Education	Vacant	
Emergency	Paul Ducasse	WH7BR
Equipment	Lloyd Cabral	KH6LC
Health&Welfare	Barbara Darling	NH7FY
Hospitality	Barbara Darling	NH7FY
Newsletter	Curt Knight	AH6RE
Programs	Milt Nodacker	AH6I
Repeater	Paul Agamata	WH6FM
Webmaster	Curt Knight	AH6RE

Special Committees

Improvement	Ron Phillips	AH6HN
Field Day	Robert Oliver	NH6AH
Hamfest	Bob Schneider	AH6J
co-chair	John Buck	KH7T
QSL Bureau	Barbara Darling	NH7FY

Meetings and Get-Togethers

Membership meetings – Second Saturday of each month at 2PM at the Kea'au Community Center

Board Meetings – will be held every other month 1 hour prior to the general membership meeting at the same location as the general meeting (January, March, May, July, September, November).

Friday Lunches – A group meets for lunch every Friday at 11:30 at Hokulani's Steak House in the mall at Kea'au near the Post Office.

East Hawai'i Net

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

BIWARN accessible Repeaters

Repeaters in bold font are BIWARN/MCDA linked. When operating over a link, remember to leave extra time in each transmission for the link to be established. The number in parentheses is the tone access frequency.

145.29-	HOVE-Ka'u WH6FC (100)
146.66-	HOVE (100)
146.68-	Kea'au limited area KH6EJ
146.76-	Kulani KH6EJ
146.82-	Mauna Loa ARES KH6EJ
146.88-	Pepe'ekeo KH6EJ (may be linked)
146.92-	Ka'u PD KH6EJ
146.94-	Haleakala Maui KH6RS (110.9)
147.02+	Haleakala Maui RACES AH6JA
147.04+	Mauna Loa RACES AH6JA
147.16+	Kona (Hualalai) WH6DEW (100)
147.32+	Waimea Hospital NH7HI (100)
147.38+	Waimea East KH7T experimental
442.35+	Ka'anapali Maui (136.5)
442.5+	Kea'au KH6EJ
443.40+	Ocean View KH7MS (77.0)
443.40+	Kona KH7MS (100.0)
443.65+	Ocean View Hub
444.225+	Haleakala Maui KH6RS (110.9)
444.45+	Parker Ranch KH6EJ (88.5)
444.9+	Hilo WH6FM WIN system (100)
444.775+	Hilo WH6FM XO system (123)

Hawaii QSO Party

Now that Field Day is over it is time to emphasize the upcoming Hawaii QSO Party at the end of August. This is the only operating event emphasizing Hawaii and has the sponsorship of six active clubs throughout the islands and support of most of the rest.

A group of clubs in Hawaii is sponsoring the annual Hawaii QSO Party in August. Come join with us in making the 2011 event another success. Hawaii, a very special radio destination, merits support from its Hams.

The Hawaii QSO Party is sponsored by:

- Battleship Missouri Amateur Radio Club
- EARC - Emergency Amateur Radio Club
- HARC - Honolulu Amateur Radio Club
- HIARC - Hilo Amateur Radio Club
- KARC - Koolau Amateur Radio Club
- Waikiki Amateur Radio Club

The purpose in holding the yearly contest is to expand the world of Amateur Radio by promoting amateur radio contacts with stations in Hawaii and increasing the number of active Hawaii Ham stations. It is an opportunity to introduce newly licensed operators to the world of HF, DX'ing and contesting. It is a chance to practice some aspects of emergency communications and it is just plain Fun.

Free contest logging software from the N1MM contesting group supports the HQP (Hawaii QSO Party). Simplified installation instructions are available on the contest web site.

The contest runs from 04:00 UTC Aug 27 to 22:00 UTC Aug 28, 2011 (6 PM Friday August 26 to Noon Hawaii Time Sunday August 28). There are awards in six categories operating the HF bands in three modes – Phone, CW and Digital.

The Battleship Missouri (KH6BB) will again operate from Sand Island and a mini DX-pedition is putting Kalawao County on the air. The Hilo Amateur Radio club will operate their famous call ALOHA from Moku Ola Is. (Coconut Is.) on the Big Island.

Details about the contest are available on-line at www.karc.net/HQP

Thanks to Joe Speroni, AH0A for the information. [via Bob AH6J]



Well-known HQP participants Randy KH6RC, Fred KH7Y, and John KH7T display their awards from last year.



A New Tower Sprouts in Puna



Finally on the 365th day of our residence the tower went up. First contact was on 20 meters to Panama City, FL. My RS was 57 running 50 watts. Much fun in store! 73 to all, Milt, AH6I and Jean, WH7WT



10-10 International Net

Now that the new solar cycle may be heating up, it's a good time to check into the action on 10 meters.

10-10 International Net will have their Summer Phone QSO Party the first full weekend of August, August 6th and 7th,

0001 UTC Saturday until 2359 UTC Sunday. Operate in the phone band on SSB, AM, or FM.

2011 is the 49th anniversary of 10-10. Members working the year-long Anniversary QSO Party should look out for members having 49 in their 10-10 number.

Irene NH7PE was approved to use the 10-10 net club call sign, W6OI, during Field Day and also during the Aloha Chapter's regular net time. Five stations contacted will receive the W6OI QSL card.

The Aloha Chapter meets Mondays at 6:30 PM local time on 28.490. Two national daily nets are called every day except Sunday at 1800Z on 28.300 and 28.800 MHz.

Thanks Irene NH7PE



**Big Island Amateur Radio Club
August Meeting to be August 27
on Coconut Island**

Following the tradition of recent years, there will be no business meeting on the second Saturday of August. Instead, BIARC will join the Hilo Amateur Radio Club for a potluck picnic on the fourth Saturday, August 27. Location will be the pavilion on Moku Ola, also known as Coconut Island, behind the Hilo Hawaiian Hotel. Potluck lunch will begin at 11:30. The all-day gathering will celebrate the 80th anniversary of the Hilo Amateur Radio Club, and will participate in the annual Hawaii QSO Party, sponsored by the Ko'olau Amateur Radio Club, based on O'ahu. Dean Manley KH6B hopes to operate two stations, using the callsign ALOHA. Dean will be holding a planning meeting Saturday August 6 at 8:00 a.m. at Jack-in-the Box. He is seeking people who will volunteer use of radios and portable HF antennas, and assist with station setup.



**Big Island Amateur Radio Club
Board Meeting of July 9, 2011**

The July BIARC meeting was held at the Orchidland LDS Church, both the Kea'au Community Center and the Puna Covenant Church having been unavailable. The former was reserved for a graduation party, the latter the site of the church's fundraising sale. The meeting was called to order at 12:42 p.m. by club president Tom Thornton AH6ZZ. Ten of fifteen board members were present.

Milt Nodacker AH6I explained that no prayer or invocation was needed to open a non-church-sponsored event at the LDS Church, concern regarding such a requirement having been expressed by one BIARC member. He does open his amateur licensing classes with prayers, the classes being sponsored by the LDS.

Treasurer's report: Lloyd Cabral KH6LC was

absent. It was reported in his behalf that the club had \$2,725.77 in the bank as of June 30. There was no report as to club membership.

Barbara Darling NH7FY reported that she and Richard AH7G are still sending out two club newsletters by mail. All others are sent out by e-mail, with printed copies being available for reading at subsequent club meetings.

BIARC will not be an official sponsor of the August Hawaii QSO Party. However, Tom Thornton and Rick Gardner WH6LU will actively participate. Others will be encouraged at the club's August potluck, held in conjunction with the QSO party.

Repeater Committee:

- 1) Paul Ducasse WH7BR reported that repeaters had recently experienced two power outages. A fallen tree disrupted power to Kulani for half a day. Helco power was down to Mauna Loa for 16 hours. Helco did not know about the outage until Hawaii Public Radio, who presently holds the lease to the facility, called them. The generator ran for 10 hours, until it ran out of gas. During the business meeting, it was mentioned that Paul Agamata WH6FM has installed a link that can be used for remote telemetry from Mauna Loa to Hilo, making it possible to monitor Mauna Loa's electrical power from Hilo. Hawaii Public Radio is very interested in this capability.
- 2) Rick Gardner has donated a GE UHF repeater to the club. Paul Agamata presently has it and is checking it out. As a condition of the donation, Rick has stipulated that the repeater must be used as a nonlinked stand-alone.
- 3) Paul Agamata presently has the club's somewhat portable VHF repeater, portability of this repeater being somewhat limited by the size of the duplexer cans.

Website: Curt Knight AH6RE wants to move the website to a free hosting service. He is presently paying for web hosting. [see below -Ed]

Health and Welfare: Barbara Darling reported that Herb Vanderbeek WY6G, age 90, was in good enough health that he planned to return to the Big Island later in July. Kelly McGrew and wife Tannya had moved to Alaska July 4 so that Tannya could be nanny to their grandchildren. They are keeping their home in HPP and plan to return.

QSL Bureau: Barbara Darling reported that she received 5,100 cards in June, mostly from Japan. So far this year, 17,749 cards have been received. She still needs someone on Maui to handle Maui's inbound cards. She will accept volunteers for individual towns who will not cover the entire island.

Old Business: Milt Nodacker returned the keys to the Wailoa Art Center after BIARC held Field Day there June

25-26. He has reserved the center for Field Day 2012.

The club was reminded that BIARC will participate in an island-wide swap meet on October 22, in lieu of the club's regularly scheduled meeting. John Buck KH7T has reserved the County Recreation Center in Waimea, and is handling other arrangements.

Bob Schneider AH6J reported that the club has received the new General Class tests that took effect July 1. Bob is presently BIARC's testing coordinator.

Tom Thornton thanked club vice-president Milt Nodacker for handling matters when he is out of town. Due to his job, Tom now spends most of his time on O'ahu.

New Business: Milt reported that a member of the public donated a Yaesu FT890 to the club, along with an Astron 35 amp power supply. Both were new in box. The donor explained that he had bought the equipment for his son, who had quickly lost interest. Discussion followed as to what to do with the equipment. Use as a Field Day radio? Loan to a ham who will use it? Suggestion was made that the club might loan it to newly licensed Extra Class ham Darryl Koon.

The board then discussed the proposed Memorandum of Understanding (MOU) between BIARC and Hawaii County Civil Defense regarding radio preparation and operations for Civil Defense emergencies. Milt will be meeting with Civil Defense official Bill Hanson to discuss the MOU. Milt is accepting suggestions from board members and others concerning improvements to the MOU. Milt's proposed MOU is attached to the July minutes, after minutes of the regular meeting.

The board meeting was adjourned at 1:47.



Regular Club Meeting of July 9, 2011

The meeting was called to order at 2:00 by club president Tom Thornton. The meeting went directly into the program, presented by Milt Nodacker. The subject was electromagnetic pulse (EMP), the most severe likely to be from a high altitude detonation of an atomic bomb. Back in 1962, both the United States and the Soviet Union detonated high altitude blasts to study electromagnetic pulse effects. The United States detonated Starfish Prime, a 1.4 megaton blast, at an altitude of 400 kilometers over Johnston Island. A glowing cloud was visible from Honolulu after the blast. EMP was measured in Honolulu at 5,800 volts per meter of wire or antenna. EMP from the blast knocked out a lot electronics in Hawaii, including 300 streetlights. The pulse blew out streetlight fuses. At full strength, EMP can reach 50,000 volts per meter.

It is worth noting that electronics of 1962 were far less vulnerable than the later integrated circuitry. A similar blast today would likely blow out the computers in mid-80s

and later cars, causing the vehicles to quit working. It would also disable a lot of wired communications and control circuits, immediately returning us to the pre-electric era. That old Volkswagen beetle? It would likely continue to work, if one can find a filling station that still has a working gas pump.

A disturbing graphic showed what a similar blast at 400 kilometers elevation and centered over Topeka, Kansas, would do to the continental United States. Virtually the entire continental United States would be affected. Selection of Topeka as the blast location was hardly reassuring to me, given that I am from Topeka.

The Soviet tests did unexpected damage, causing an electrical power plant fire a considerable distance from their test blast.

After a break from 2:50 to 3:00, the meeting resumed for business.

President Tom Thornton suggested that the club consider buying and reselling tee shirts and/or polo shirts with the BIARC logo. On previous occasions, the club has bought such shirts through Creative Arts in Hilo. They may still have the stencils. When asked if they would be interested in purchasing BIARC shirts, at least four members raised their hands. Milt suggested that vests might be better than shirts, because vests can be worn over any shirts. I will check with Creative Arts regarding possible items, pricing, and needed quantities. I will report in the August newsletter. Members who wish to purchase will then be asked to respond.

Robert Oliver NH6AH, 2011 Field Day chair, reported that BIARC had its best Field Day in several years. Band conditions had been better than in past years. The club made 994 contacts, 623 phone and 371 CW. Testing at Field Day yielded one new Technician and one new General. Robert has offered to chair Field Day 2012.

Milt Nodacker will be starting a new Technician licensing class at the Orchidland LDS Church. The class will be church-sponsored, starts September 13, and will last six weeks. He plans to test at the Waimea ham swap meet, October 22.

The regular meeting was adjourned at 3:37.



Suggestions for Memorandum of Understanding (MOU) between BIARC and Hawaii County Civil Defense (as proposed by Milt Nodacker)

BIARC responsibilities:

Install and maintain an amateur radio repeater system capable of communicating with the most populated areas of the east part of Hawaii County.

Assure that the repeater system is operable for [a reasonable time] after the loss of commercial power.

Install and maintain at the Hilo Emergency Operations Center (EOC) an amateur radio position capable of both operating directly (simplex) and through the repeater system.

Provide to the Hilo EOC with qualified operators to maintain communications through the repeater system or by other means as necessary.

Provide a Net Control Station (NCS) and operators (not necessarily at the EOC) to maintain effective and orderly net operations.

Serve as the primary radio link between Community Emergency Response Teams (CERT) and the EOC.

Provide communications training and communications for CERT teams.

Serve as backup communications to the Kona EOC and off island in the event of failure of primary systems.

Civil Defense responsibilities:

Train and qualify CERT team members.

Provide printing services for course materials for communications training of CERT teams.

Provide funding for CERT team testing fees for amateur radio licenses.

Arrange students and venues for Communications Specialist training for CERT teams.

Provide access to BIARC equipment and antennas located at Hawaii County Civil Defense facilities for purposes of maintenance and improvement.

Respectfully submitted,
Dave Broyles KH7SO, secretary



Comments of the BIARC web site maintainer

I did not attend the July meeting, so the comments attributed to me in the Secretary's report must have been made by someone else. The BIARC web site hosting is provided by Rick Frazier AH7H at no cost to the Club. At Field Day, Rick told me that for his own convenience he would like to move the hosting to a different server. Since there is no reasonable objection to this, and it will be entirely transparent to the users of the web site, I told him to go ahead.

-Curt AH6RE