Newsletter – March 2010

President's Message

The future of Ham Radio is in good hands judging by the response of third, fourth, and fifth graders at Keaau Elementary School at their Emergency Preparedness Fair held on Friday February 18, 2010. Organized by Club Member and fellow Ham Tiara Mills (WH7DJ) and a few of her fellow High School class members from Keaau High School, the Emergency Preparedness Fair was designed to give the school kids an orientation on how to prepare for disasters and to meet with local organizations that prepare for emergencies. Presentations were put on by the Hawaii County Civil Defense, the American Red Cross, the U.S. Army, Hawaii Electric Light Company (HELCO), the Hawaii County Police Department, and of course by the Big Island Amateur Radio Club (BIARC). Laney Azevedo (WH7WX) and BIARC President Paul Ducasse (WH7BR) put on a live demonstration of how radio works which included the kids talking to Hams in the field. The kids were able to talk to fellow hams Bob Gomez (KB6EGA) and Tom Burnett (KH7N) via 2 meter VHF radios through the Kulani Repeater and talk to Ron Phillips (AH6HN) on 40 meters via the HF Radio. A bunch of oohs and aahs went through the crowd when a ham checked in from Diamond Head in Oahu. Approximately 200 elementary school kids and a dozen teachers were able to attend the Emergency

Preparedness Fair. The kids were very attentive, very polite, and very interested in Ham Radio. Thanks to everyone involved and a special thanks to Tiara Mills for her organizing the fair and best wishes for an A+ to her and her fellow high school students on their project organizing the Emergency Preparedness Fair.

"March" is that "Magical Month" where BIARC Club "dues" are "due". There are few activities these days where $20.00 will get you so many opportunities, guest speakers, monthly newsletters, radio repeater systems, special events such as Field Day, fellowship, special food events, etc. all while operating ham radios. Full membership is $20.00, Associate membership is $10.00, Student is $10.00, and Family is $10.00 per additional family member in the same household. You are able to pay your dues in person at any BIARC meeting or you can mail a check directly to the club at P.O. Box 1938, Hilo, HI 96721-1938. You will receive a receipt from club Treasurer Curt Knight (AH6RE).

If you missed the February BIARC meeting you missed quite the event! Because of a double booking at the Keaau Community Center the day of our BIARC meeting we had to meet at the BIARC "super secret" meeting location which turned out to be the Mountain View Senior Center. The super secret meeting location, located behind the Mountain View Gym turned out to be an okay venue for our terrific guest speaker Doug Lung (AH6DL) from NBC Television. Doug lives in Honomu and is the system designer for NBC's over-the-air (OVA) digital television system in over 22 television markets around the country. He gave a terrific talk which included spectacular photographs of antennas and antenna towers which have recently been upgraded around to country to accommodate the new digital OVA TV. A great time was had by all of the BIARC members listening to Doug Lung's presentation at the same time enjoying their ice cream banana splits for the Valentines Day "Ice Cream Social". Look forward to seeing you at the March BIARC meeting at the Keaau Community Center at 2 pm on Saturday March 13, 2010.

Paul Ducasse
BIARC Club President 2010

Big Island Amateur Radio Club
P.O. Box 1938
Hilo, HI 96721

www.biarc.net

Officers

President	Paul Ducasse WH7BR	985-9222
Vice President	Tom Thornton AH6ZZ	754-7412
Treasurer	Curt Knight AH6RE	966-8304
Secretary	David Broyles KH7SO	854-0362

One Year Directors

Beau Mills NH7WV	968-1271
Richard Fetchen KH6WE	982-7426
Kile Golden WH7FB	982-6782
Elizabeth Yoes WH7CU	965-5429
Chuck Epperson AH6SC	966-4698

Two Year Directors

Richard Darling AH7G	982-9126
Ron Phillips AH6HN	982-6513
Rick Frazier AH7H	985-9169
Bob Schneider AH6J	966-8146
Lloyd Cabral KH6LC	966-7782
Peter Yoes KH7HI	965-5429

Standing Committees

Service/Awards	Ron Phillips	AH6HN
Education	Harvey Motomura	AH6JA
Emergency Coord.	Vacant	
Equipment	Vacant	
Health&Welfare	Barbara Darling	NH7FY
Hospitality	Kile Golden	WH7FB
Newsletter	Curt Knight	AH6RE
Programs	Tom Thornton	AH6ZZ
Repeater	Ron Phillips	AH6HN
Webmaster	Curt Knight	AH6RE

Special Committees

Christmas Party	Committee	
Improvement	Ron Phillips	AH6HN
Field Day	Peter Yoes	KH7HI
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 each transmission for the link to be established. 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-	Pepeekeo 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
147.32+	Waimea Hospital NH7HI (100)
147.38+	Waimea East KH7T experimental
442.35+	Kaanapali Maui (136.5)
442.5+	Kea'au KH6EJ
443.65+	Ocean View Hub
444.225+	Haleakala Maui KH6RS (110.9)
444.45+	Parker Ranch KH6EJ (88.5)

Big Island Amateur Radio Club
Monthly meeting of February 13, 2010

Meeting was held at a new location, previously unused by BIARC. Both the community center and the Congregational Church in Kea'au were unavailable. Location of the meeting was the senior center in Mountain View, located behind St. Theresa's Roman Catholic Church.

Meeting was called to order by BIARC President Paul Ducasse WH7BR at 2:10 p.m. 22 persons signed the sign-in sheet, including 21 hams. Introductions were held. The meeting then recessed at 2:15 for an ice cream social, ably put together by Barbara Darling NH7FY. Servings were large and delicious. And the calorie count?? We weren't supposed think about it.

The meeting resumed at 2:40, with the program presented before the business meeting. The program was presented by Doug Lung AH6DL, a presently inactive ham who lives near Akaka Falls on the Hamakua Coast. Doug is vice-president for technology, NBC Local Media. NBC Local Media manages the 26 NBC-owned local affiliate stations nationwide, plus the NBC-owned Telemundo (Spanish language) stations. Doug's topic of discussion was the digital television (DTV) conversion, which he helped manage at several stations, including some in major market cities. He began by showing slides of several antennas, all of which would look quite impressive on any ham's shack. Seven to eight inch diameter coax? Wow. He also showed the difficulty of installing in locations operated by numerous transmitters. And we think Pepeekeo is difficult?

He then discussed what may be the future of over-the-air television, Mobile DTV. Mobile DTV deals primarily with hand-held devices such as iPhones and iPods. It is based upon robust IP transport overlaid on the ATSC (DTV) standard, essentially combining Internet and DTV technologies. The FCC approved the Mobile DTV standard in October, 2009. There are presently 20 stations operating in the Washington, D.C. area, but none in Hawaii. Doug's presentation lasted 55 minutes, but seemed much shorter, with the suggestion that he return for another

presentation.

The business meeting began at 3:45, with the promise by BIARC president Paul Ducasse that the meeting would last less than 15 minutes. The secretary's report as printed in the newsletter was approved.

Next item during the business meeting was the Repeater Committee report, covering a number of items:

1) The Mauna Loa repeater was repaired by Paul Agamata W6TUS, who had to assemble a replacement transmitter amplifier board from individual components. The fried board was passed around, so that everyone could see what toast really looks like.

2) The Cushman service monitor, donated by Helco, is being sent to Paul Agamata for repair.

3) The Repeater Committee is considering moving the Naalehu repeater from the Naalehu police station to a better location. Chuck Epperson AH6SC is investigating a location.

4) Doc Goldman has donated some ½ inch hardline and some connectors.

5) John Buck KH7T recommended that hams consider the 440 MHz band (70 cm) in lieu of the 2 meter (144 MHz) band when purchasing new radios, purchasing dual banders. It is less expensive to purchase repeater equipment for the higher frequency band.

6) Ron Phillips AH6HN asked people to use simplex whenever possible, so as to avoid tying up the linked repeater system.

7) Ron Phillips stated that the repeater committee is trying to locate BIARC's portable 2 meter repeater somewhere in Leilani Estates as a stand-alone alternative to the linked repeater system.

Website: Curt Knight AH6RE announced that the website is up to date.

Health and Welfare: Barbara Darling reported that life member Gloria Whiteley is doing well. Anne Miller, widow of longtime (1937) ham and former BIARC president Eddie Miller W7GMH had a rough week at the Yukio Otsuko Veterans Home. Kile Golden WH7FB, who suffered a stroke in early December and is also at the Veterans Home, is now standing up and ate his first real food on Thursday.

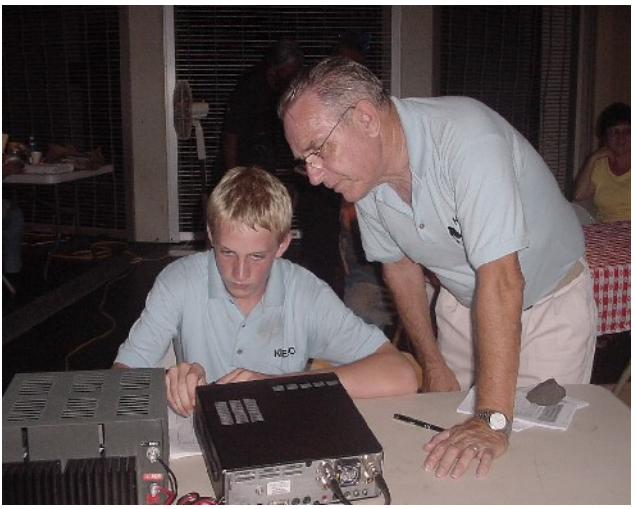
Newsletter: Curt Knight said that articles are welcome.

No old business.

New business: Ron Phillips said that he has not updated the membership roster on the website, and won't until after dues are finally due for 2010 on March 31.

As promised by president Paul Ducasse, the meeting was adjourned after a 15 minute business meeting at 4:00.

Respectfully submitted,
Dave Broyles KH7SO, secretary



Fred KH7Y and grandson Mike KI6ESO

BIARC Biographies – Fred KH7Y

In 1956 at Orinda, CA I became interested in ham radio at the age of 13. I had a chance to meet Norm Brooks, then W6WLI (K6FO) a nearby neighbor. He offered to help me study for my novice license. I would go to his home after school and he would teach me about electronics and coach me with my CW skills to pass the test. In later 1956 Mr. Brooks gave me the novice test. In those days you had to wait a month or more to see if you passed the test. I received the call WN6YKM which was good for one year. I upgraded in 1957 and received W6YKM. Later I received W6YM and since I moved to Hawaii I now hold KH7Y. During those first years I remember going to Norm's with my Radio Flyer wagon. Norm was generous and gave me many parts to build my first transmitter which was a 6AG7 tube and later I added a WW2 1625 tube which had about 25 watts output on 40 meters. Little did I know at the time that this hobby would lead to bigger and better opportunities. After high school and a hitch in the US Navy as a radioman I married the love of my life Sandy in 1963. Also in 1963 I started working in the cable TV business. I was a pioneer in this field. I ended my career as an airport manager, also a Pilot with Commercial privileges. Norm Brooks K6FO is still active, I have worked him in recent years with the help of his daughter. I thank Norm for his loving help in heading me in the right direction! The tradition continues now with my grandson Mike receiving his call KI6ESO. Aloha to my many friends around the world.

Some Kids Day action at KH6LC

Mary K6FK and Ken N6KB

Top Band in San Luis Obispo County

Ken Brown N6KB

Back in about 1988 I was invited by Cliff W6HDO to visit and operate in a 160 meter contest. I think it was the ARRL 160 test. The station was at the Cuesta College Radio Club site, across Highway 1 from the college. The college and the radio club site are all on land donated by the US Army. This used to be Camp San Luis Obispo Army Base. The base is still there, just smaller now. The Cuesta College Electronic Technology Department was granted a parcel of land about 120 acres in size, with a little hill in the middle. The site was used to demonstrate radio technology to students in the Electronics Technology Program at the college and by the Cuesta College Radio Club.

The radio club and ET Lab acreage was overseen by Ed English

W6WYQ an electronics instructor and Director of the ET Department at Cuesta College. Ed had got an old AM broadcast tower donated to the club, so there was a 130 foot, base insulated, guyed tower on the top of the little hill that belonged to the radio club. There was also a little radio shack, built by the college construction trades classes. It was probably about 12' X 12' with one window and one door. The shack was powered by photo-voltaic charged batteries and a generator. This was my first exposure to 160 meters, and my first exposure to any contest other than Field Day. I really liked 160 meters, especially with a full sized transmitting antenna. The remote site was very quiet, compared to all the places I had lived in town. I was given permission to build Beverage antennas at the club site. For a couple of years the operators were Cliff W6HDO, Mort Brewer W6JU, Ed W6WYQ and me AA6DT.

I met Niko W6/YT3NC in a cross town 40 meter CW QSO, and we became good friends. Eventually Niko got his USA license, AC6DD. I invited Niko to help with the 160 operations at the Cuesta College Radio Club. Eventually both Niko and I enrolled in a night course given by Ed English at Cuesta College, to sort of legitimize our use of the club radio site. Our antenna experiments there became ET course projects. Niko's project was an 80 Meter Foursquare Array, and mine was Beverage Receiving Antennas. We also added lots of radials to the already substantial radial system around the tower. I had access to broken off stop sign posts from the County Roads Engineering Department, when I worked as a Communication Tech for San Luis Obispo County. Those sign posts became Beverage antenna posts. I spent many hours digging post holes and splicing together various lengths of 4 X 4 posts. I started with simple single wire Beverages, fed with a transformer at one end and terminated with a resistor at the far end. They worked really well. Eventually I had built seven two wire Beverages. With these you could select either of two directions, so with seven of them there were 14 directional antenna possibilities to choose from. There was also an active loop built by Ed W6WYQ and the transmitting vertical to choose from. I got surplus Wang word processor cable from the county to feed the Beverages. This Wang cable is like two RG-59 coaxes in parallel, bonded together like zip cord. It was perfect for the two directional

feeds of each two wire Beverage.

For several years we used just my Kenwood TS-440 running on some surplus microwave site batteries, charged by the club's photo-voltaic panels. Nobody had an amplifier that worked on 160 meters. We used a Coleman lantern and a catalytic heater for light and heat. We did real well with 100 watts.

Sometimes Chris WA6SUY would bring his Drake L-7. For this we used the two cylinder air cooled Lister diesel generator. It was a 120/208 three phase unit, so we had a big Sola transformer to convert the 208 to 240. (We didn't really want the saturable reactor voltage regulation feature of the Sola transformer. The Sola just happened to be what was available for free, to get 240 VAC from the 208). I also bought a Heath SB-201 amplifier and modified it to work on 160 meters, so we had about 650 watts, when Chris and his L-7 were not around.

We operated lots of 160 meter contests from that site, using various call signs, such as calls of the operators and the club callsign, WA6RKE. We did fairly well, often leading our section in the ARRL tests, and had lots of fun. We never used any transceiver besides my TS-440. At the time I did not realize how mediocre the receiver in that thing is. I'm sure we could have done a lot better with a better rig.

Sometime around 1996 the Phys Ed department at the college got the notion that the radio club acreage would be a neat place for a cross county jogging / exercise course. The parcel was given to the college expressly for the purpose of radio/electronics instructional use, so the jocks really had no justification to be there at all. That did not stop them though. They had the facilities maintenance people take down all of the Beverages, because they intersected the cross country jogging trails they laid out on the ET Department property. I think the Ed may have even filed a lawsuit to try to get the jocks out of there. I don't know what ever came of it all, because I moved away. It was really a rotten deal.

Anyway, I found other places to set up my 160 meter operations. It was never quite as good as having the full quarter wavelength

tower at the Cuesta College Radio Club site. Also, not having a permanently installed transmitting tower, there was less time available for improvement of receiving antennas. Then in 2000 I moved to Hilo, Hawaii.

Niko tried 160 meter contesting a bit from his home in town, and eventually made a connection with someone responsible for the Union Oil Company pier in Avila, Port San Luis, and was able to use the pier for his 160 meter contest operations. If you look at Niko's web pages, you'll see that he has been improving his portable setup over the years, and has used several different locations including the Piedras Blancas Lighthouse.

I must thank Cliff W6HDO (most recently K7RR) SK and Ed W6WYQ for introducing me to 160 meters and giving me access to the Cuesta College Radio Club site. It was great while it lasted. Mort W6JU was always inspirational with his stories from the golden days of big time radio and really big transmitters. He was also a top notch CW operator

Ken N6KB

Notes:

Ed English (Wallace E. English) W6WYQ retired from the Royal Canadian Air Force before becoming an electronics instructor. He has authored several articles published in QST and other Amateur Radio magazines and books. His work on the DDRR Horizontal Loop Antenna can be found in the ARRL Antenna Book.

Mort Brewer W6JU (SK) retired from a long career as a broadcast engineer for NBC and earlier RCA. He worked at many big time radio installations such as KPH, the RCA transmitting site near Bolinas, California, and KFI and KNBC TV in Los Angeles.

Cliff Buttschardt W6HDO (SK) (also held call sign K7RR) worked in various aspects of radio communications, including shipboard Radio Operator, Communications Technician for the State of California and for the County of San Luis Obispo. Cliff was very active in AMSAT.

Both Cliff and Ed were instructors to the CubeSat program at Cuesta Community College and Cal Poly San Luis Obispo, which had college and university students building micro-satellites to be put into orbit from the space shuttle.

Nikola Cimbur was schooled in electrical and electronics technology in Slovenia (former Yugoslavia) and has held the call signs YT3NC, S53NC and now AC6DD. Niko is a licensed Journeyman Electrician and now works for Pacific Gas and Electric Company at the Diablo Canyon Nuclear Power Plant.

Chris Victor K6CV (formerly WA6SUY) is an Engineering graduate of Cal Poly San Luis Obispo, and has worked as a broadcast engineer at KGO in San Fransisco Bay. He now works as a Data Network Engineer for Data Broadcasting Corporation.

Big Island Amateur Radio Club

PO Box 1938

Hilo, HI 96721